URBAN WATER MANAGEMENT PLAN

City of San Buenaventura
Department of Public Works

December 2005

VENTURA
PUBLIC WORKS

City of San Buenaventura
2005 Urban Water Management Plan

Water Utility Information

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F.	City Admin. Report	Reclaimed Water System Expansion Policy

Section 1 - Agency Coordination

1.1 - Plan Adoption

This is the 2005 Urban Water Management Plan (UWMP) for the City of San Buenaventura (City). The plan has been prepared and will be submitted to the California Department of Water Resources in compliance with the California Urban Water Management Planning Act (UWMP Act, California Water Code, Division 6, Part 2.6), a California statute. The purpose of this plan is to evaluate the City's water supply, and water conservation program. An UWMP is required in order for a water supplier to be eligible for Department of Water Resources (DWR) administered state grants, loans and drought assistance. Water conservation and efficient use of California's water resources are becoming increasingly important, and the City has decided to continue development and implementation of water conservation measures appropriate for its service area.

The California Urban Water Management Planning Act, requires urban water purveyors providing water for municipal purposes to more than 3,000 customers, or supplying more than 3,000 AF of water annually, to prepare and adopt an UWMP at least once every five years on or before December 31 in years ending in five and zero. The UWMP Act is designed to ensure that water utilities give careful consideration to their water resource needs and supplies, water conservation and other alternative water sources. The State of California Department of Water Resources (DWR) shall review all plans submitted and prepares a summary report, submitted to Legislature one year after UWMPS are due to the Department, detailing the status of and outstanding elements of the submitted reports.

1.2 - Public Participation

The UWMP Act requires water suppliers coordinate the preparation of its plan with other appropriate agencies in the area. This includes other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable. In addition, urban water agencies preparing plans are required to hold a public hearing on the UWMP prior to its adoption, and to file the adopted plan with the DWR. In response to these requirements, a public hearing was conducted on December 5, 2005 by the City to receive public comment and input on the UWMP. The final plan was adopted by the City Council on December 19, 2005, By Resolution No. 2005-098 (copy in Appendix E)

Table 1-1 summarizes the efforts the City has taken to include the various City departments, agencies and citizens in the preparation of this document.

Table 1-1

Coordination and Public Involvement

Entities	Helped Write the Plan	Was Contacted for Assistance	Was Sent a Copy of the Draft	Commented on the Draft	Attended Public Meetings	Was sent a Notice of Intention to Adopt
City Departments			X	X	X	
Fox Canon GMA			X	X		
Casitas MWD			X			
County Resource Mgmt. Agency			X			
General Public						
Other			X			

1.3 - Coordination within the City

Preparation of UWMP 2005 was coordinated by the City Utilities Division. Utilities division staff met with and coordinated the development of the UWMP with various City departments.

The City Council, biennially reviews the short and long term water supply-demand outlook for the City in a Biennial Water Supply Report. Adopted in October 2004, the 2004 Biennial Water Supply Report confirmed that based on the findings in the report and planned capital improvements, there is a sufficient water supply to satisfy the City's water needs for at least the next ten years. The City has adopted guidelines, which require that adequate water supply and wastewater treatment capacities are available before new development can be approved by the Community Development Department.

1.4 - Interagencies

Various agencies are involved in supplying water to the City or having jurisdiction over a portion of the water resources. This section briefly discusses each one.

Ventura County

State Department of Health Services, Ventura County Environmental Health and Public Health Services require prior contact before the City can issue a Water Quality Public Notification. The State Department of Health Services administers regulations that

protect public health and safety and help to ensure drinking water is pure, potable and wholesome. The County Environmental Health administers regulations affecting businesses that use drinking water for their customers. The Public Health Services monitor hospitals and medical clinics and stand ready to provide health advisory alerts to the community.

Casitas Municipal Water District (Casitas)

Casitas is a wholesaler of treated surface water from Lake Casitas to the City. The western portion of the City is within the Casitas service area and use of Casitas water is restricted to areas within its boundaries. Approximately 30 percent of the City's water accounts reside within the Casitas service area (see Figure 1-1). Currently the City purchases water from Casitas through an agreement that requires a minimum purchase of 6,000 acre-feet per year and up to 8,000 acre-feet per year.

United Water Conservation District (United)

United is primarily a groundwater recharger and a wholesale purveyor in central Ventura County. The eastern portion, approximately 70% of City's water accounts, is located within the United Water Conservation District service area (see Figure 1-1). United does not provide any water directly to the City. However, the City's three wells, located near the Buenaventura Golf Course, are within the United boundaries and are subject to United semiannual extraction fees.

The primary functions of United include:

1. Storage and management of storm water flows collected in Lake Piru.
2. Recharge of groundwater basins along the Santa Clara River.
3. Recharge of groundwater basins in the Oxnard Plain.
4. Wholesale delivery of groundwater to Oxnard, Port Hueneme Water Agency, and several mutual water companies for municipal and industrial use.
5. Delivery of surface water to the Pleasant Valley County Water District and to individual agricultural customers on the Oxnard Plain.

Fox Canyon Groundwater Management Agency (GMA)

The Fox GMA was created by state legislation in 1982 to manage local groundwater basins and resources in a manner to reduce overdraft of the Oxnard Plain and stop seawater intrusion. A major goal of the Fox Canyon GMA is to regulate and reduce future extractions of groundwater from the Oxnard Plain aquifers, in order to operate the basin at a safe yield. In August 1990, the Fox Canyon GMA passed Ordinance No. 5, which requires existing groundwater users to reduce their future well water extractions by five percent every five years until a 25 percent reduction is reached by the year 2010.

The City's three existing potable Golf Course Wells pump from the Fox Canyon Aquifer, which are regulated by the Fox Canyon GMA and United. Golf Course Wells 5 & 6 are active and Golf Course Well 3 is currently inactive. A fourth, Golf Course Well #2 is used as a backup well to irrigate the City's Buenaventura Golf Course. Currently, the Golf Course is irrigated by reclaimed water. Golf Course Well 2, also pumps from the Fox Canyon Aquifer and is regulated by the Fox Canyon GMA and United.

1.5 - Water Shortage Emergency Response

The City has developed two plans to mitigate short-term water supply shortages. These plans are the "City of San Buenaventura Emergency Plan" and "Principles and Guidelines for Emergency Water Ordinance." The "City of San Buenaventura Emergency Plan" is a comprehensive plan of action developed conjunctively by various City departments for coordination of emergency services in the event of a disaster. The Emergency Plan is comprised of two parts, the "Basic Plan" and the "Annexes."

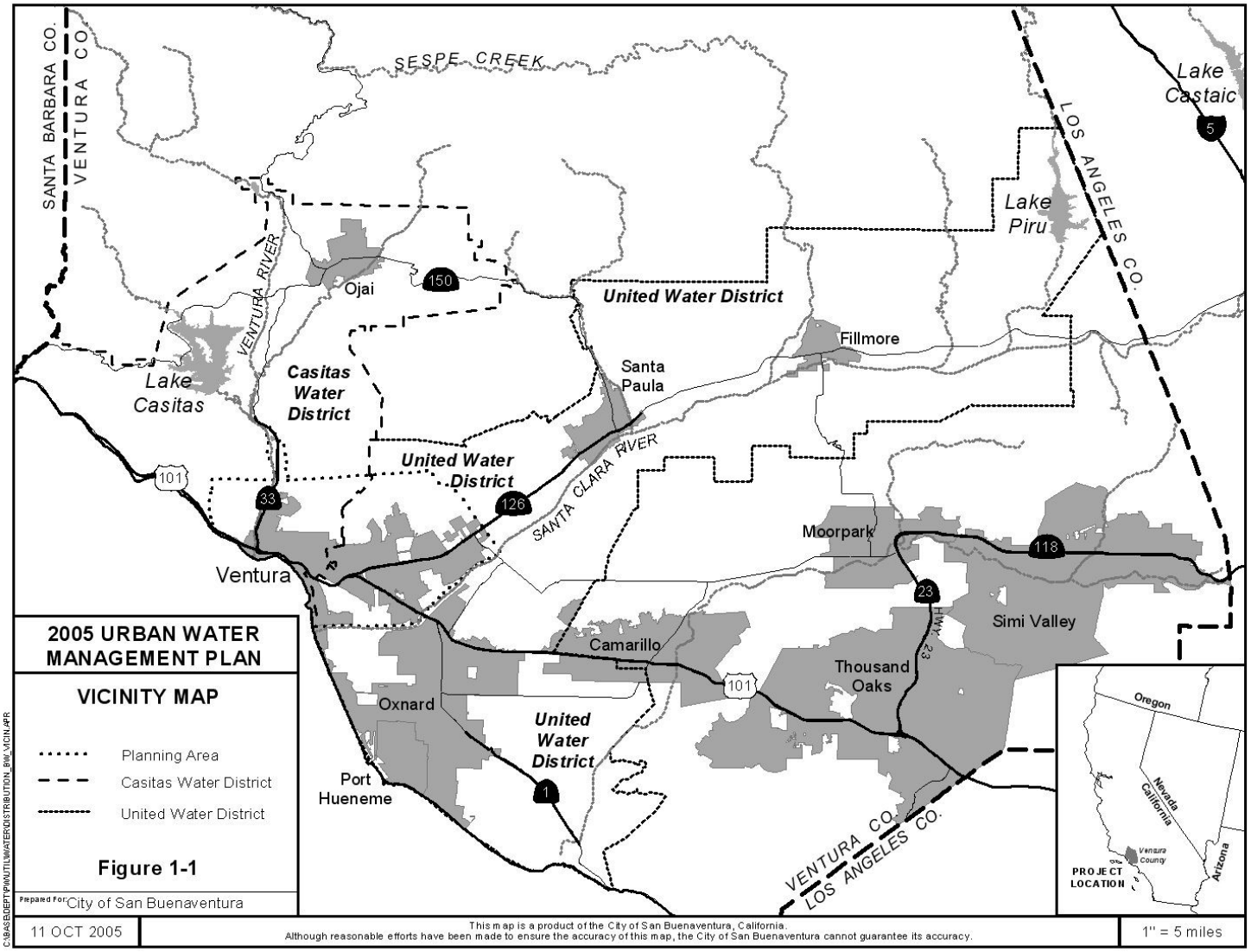
The Basic Plan addresses planned response to extraordinary emergency situations associated with natural disasters, technological incidents and war operations. It provides operational concepts relating to various emergency situations, identified components of the Local Emergency Management Organization, and describes the overall responsibilities of the City for protection of life and property and assuring the overall well-being of the population. The plan also identifies the sources of outside support which might be provided (through mutual aid and specific statutory authorities) by other jurisdictions, state and federal agencies, and the private sector.

The Annexes establish policies and procedures and assigns responsibilities to ensure the effective management of emergency operations during peacetime and emergency situations. It provides information on the dissemination of emergency public information, emergency communications, alerting and warning procedures, and damage assessment and reporting. The annexes describe the organizational and operational concepts for managing emergency operations. The "Principles and Guidelines for Emergency Water Ordinance" is a draft ordinance developed by the City Water Division to mitigate the loss of potable water supply due to natural or manmade disasters. The enabling ordinance requires action by the City Council in the event of an emergency and provides the City Council and City Manager with appropriate guidelines to maintain an equitable distribution of water. Two levels of disaster are identified:

Level I being short-term loss or unreliability of water supply due to disaster or catastrophe caused by an unforeseen natural or manmade event.

Level 2 being long-term loss of supply due to conditions resulting over an extended period of time.

Priorities of water usage are identified by user classification dependent upon the severity of disaster, and provisions are outlined for immediate implementation to mitigate the shortage. The draft ordinance is included in Appendix D of the UWMP.


SANTA BARBARA CO.
VENTURA CO.
SESPE CREEK
VENTURA RIVER
Ojai
150
United Water District
Lake Piru
LOS ANGELES CO.
Lake Castaic
5
Fillmore
Lake Casitas
Casitas Water District
Santa Paula
United Water District
101
33
126
SANTA CLARA RIVER
Moorpark
118
Ventura
23
HWY 23
Simi Valley
Camarillo
Thousand Oaks
101
Oxnard
United Water District
Port Hueneme
1
VENTURA CO.
LOS ANGELES CO.
2005 URBAN WATER MANAGEMENT PLAN
VICINITY MAP
Planning Area
Casitas Water District
United Water District
Figure 1-1
Prepared For: City of San Buenaventura
Oregon
Nevada
California
Arizona
Ventura County
PROJECT LOCATION
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11 OCT 2005
This map is a product of the City of San Buenaventura, California.
Although reasonable efforts have been made to ensure the accuracy of this map, the City of San Buenaventura cannot guarantee its accuracy.
1" = 5 miles

Section 2 - Contents of Plan
City of San Buenaventura - History and Water Facilities

2.1 - History, Growth, and Other Demographic Factors

The City developed as a result of the ninth and last mission founded in California by Father Junipero Serra in 1782. In 1866, the City incorporated an area of about one square mile around the original Mission San Buenaventura. Since that time, the City has grown to an estimated 21 square miles. An estimated population of 109,812 is currently supplied water from the City's water system. This includes several unincorporated County areas, such as the Canada Larga area on the northwest and developing areas northeast of the City boundaries. The City is located 62 miles north of Los Angeles and 30 miles south of Santa Barbara along the California coastline.

The City Charter provides for a Council-Manager form of government. A seven member Council is elected at large for four-year terms, with the Mayor selected by the Council for a two-year term.

The Spanish Fathers for the Mission San Buenaventura developed the first water system for the City. It consisted of an aqueduct (that is now abandoned) to convey water from the Ventura River, near San Antonio Creek, to a reservoir located behind the Mission. During subsequent development around the Mission, additional groundwater was obtained from wells in the Ventura and Santa Clara River basins. Water facilities were developed and operated for the City by several individuals and companies over the period of 1869 to 1923. In 1923, the City acquired the water system from the Southern California Edison Company and assumed the responsibility of providing water to City residents. In years following, the City developed additional sources of surface and groundwater, including wells and improvements to the surface water diversion from the Ventura River. Also, since 1960, the City has purchased surface water from Casitas Municipal Water District to supplement its water supplies. As the City expands toward the east, additional groundwater sources have been developed to meet increasing demands.

Table 2-I shows the estimated population history for the City. Population estimates were taken from the California Department of Finance (Table 2:E-4) and adjusted to include some unincorporated county areas served by the City's water system from 1990 forward. Future population projections for the City reflect a 088% annual growth rate, which is equivalent to the annual growth over the past 10 years. In addition, future population for the unincorporated areas served by the City's water system is based on an average customer count, over the past five years, which reflects a growth rate of 0.35%.

Table 2-1

Population Served by Water System

Year	Population
1940	13,264
1950	16,534
1960	29,114
1970	57,964
1980	74,393
1990	94,856
2000	103,238
2001	104,153
2002	105,267
2003	106,782
2004	109,002
Projections	
2005	109,812
2010	114,629
2015	119,659
2020	124,913
2025	130,400

2.2 - Climate

San Buenaventura has a climate that is similar to a Mediterranean coastal city. That is, the winters are cool, and the summers are warm and mild. The average temperature range is in the 70's and it is uncommon that the temperature drops below freezing. The area has an average rainfall of approximately 15 inches. However, the current rain year has recorded 33.83 inches of rain. This is the fourth wettest year on record for Ventura and is not reflective of our normal rainfall. During the summer months, a layer of fog is usually present over the City and this results in a general decrease of water consumption. Table 2-2 shows the average annual climate information by month.

Table 2-2

Annual Climate Information

Month	Standard Monthly Avg. ETo[1]	Average Rainfall [2]	Average Temperature[3]
Jan	1.83	3.43	65.4
Feb	2.20	3.34	66.3
Mar	3.42	2.74	66.2
Apr	4.49	0.91	67.8
May	5.25	0.28	68.8
Jun	5.67	0.06	71.2
Jul	5.86	0.01	74.0
Aug	5.61	0.02	75.0
Sep	4.49	0.22	75.1
Oct	3.42	0.50	74.1
Nov	2.36	1.40	70.5
Dec	1.83	2.54	66.6
Annual Average	46.43	15.45	70.1

Notes:

[1] Avg. ETo (evapotranspiration) figures are from the California Irrigation Management Information System's Web site http://www.cimis.water.ca/gov/cimis/monthlyEToReport.

[2] The average rainfall data is from Ventura County Watershed Protection District's web site for station 66 www.countyofventura.org

[3] The average temperature figures are from the Western Regional Climate Center web site www.wrcc.dri.edu

2.3 - Water Treatment, Distribution Facilities and Service Area

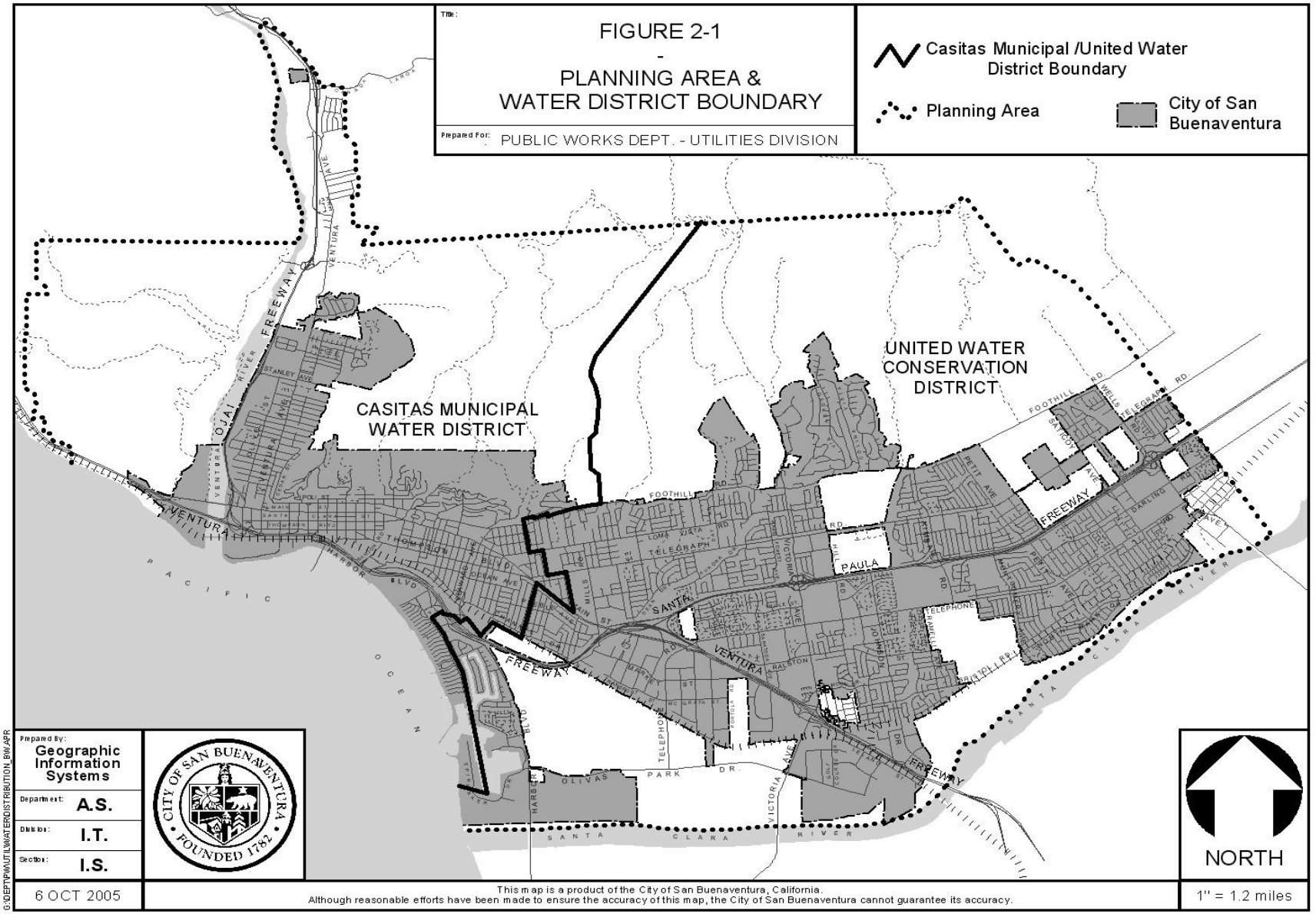
Currently, the City's water system serves approximately 31,000 water service connections, which includes the population of the City plus some additional areas outside the City boundaries (see Figure 2-1). The western portion of the City is within the Casitas Municipal Water District service area. The eastern portion of the City is within United Water Conservation District's boundaries. Water service is provided to all residential, commercial, industrial and agricultural customers; including fire protection users.

The Ventura River on the west, Foster Park on the north, Franklin Barranca and the Santa Clara River to the east, and the Pacific Ocean as the southern boundary, bound the City's planning area. The total planning area encompasses approximately 40

square miles. The water service area also includes the Saticoy Country Club (SCC) (66 residences with tennis and country club facilities) located east of the City. They have their own stand-alone system, which includes (2) wells, (1) booster pump station and (2) storage tanks. The responsibilities are shared between the City and the Country Club. The SCC system has a separate Water Supply Permit from the State Department of Health Services.

The City water system is a complex system of 14 pressure zones, 13 wells, 22 booster stations, approximately 500 miles of pipelines ranging from 4-inches to 36-inches in diameter, and a total storage capacity of approximately 48 million gallons in 33 tanks and reservoirs. The system delivers water from sea level to a maximum elevation of over 1,000 feet. The City operates three purification facilities, including one conventional filtration treatment plant for surface water sources on the westside of the City, and two iron/manganese removal treatment plants for groundwater sources on the eastside. Refer to Figure 2-2 for locations of major water facilities.

The City also maintains and operates the Ventura Water Reclamation Facility. See Section 7 for further description.


Title:
FIGURE 2-1
-
PLANNING AREA &
WATER DISTRICT BOUNDARY
Prepared For: PUBLIC WORKS DEPT. - UTILITIES DIVISION
Casitas Municipal /United Water District Boundary
Planning Area
City of San Buenaventura
CASITAS MUNICIPAL WATER DISTRICT
UNITED WATER CONSERVATION DISTRICT
OJAI FREEWAY
VENTURA
PACIFIC
OCEAN
FOOTHILL RD.
TELEGRAPH RD.
WELLS RD.
SATICOY AVE.
PETIT AVE.
DARLING RD.
PAULA
SANTA CLARA RIVER
HARBOR BLVD
TELEPHONE RD.
OLIVAS PARK DR.
VICTORIA AVE.
Prepared By:
Geographic Information Systems
Department: A.S.
Division: I.T.
Section: I.S.
CITY OF SAN BUENAVENTURA
FOUNDED 1782
NORTH
6 OCT 2005
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1" = 1.2 miles
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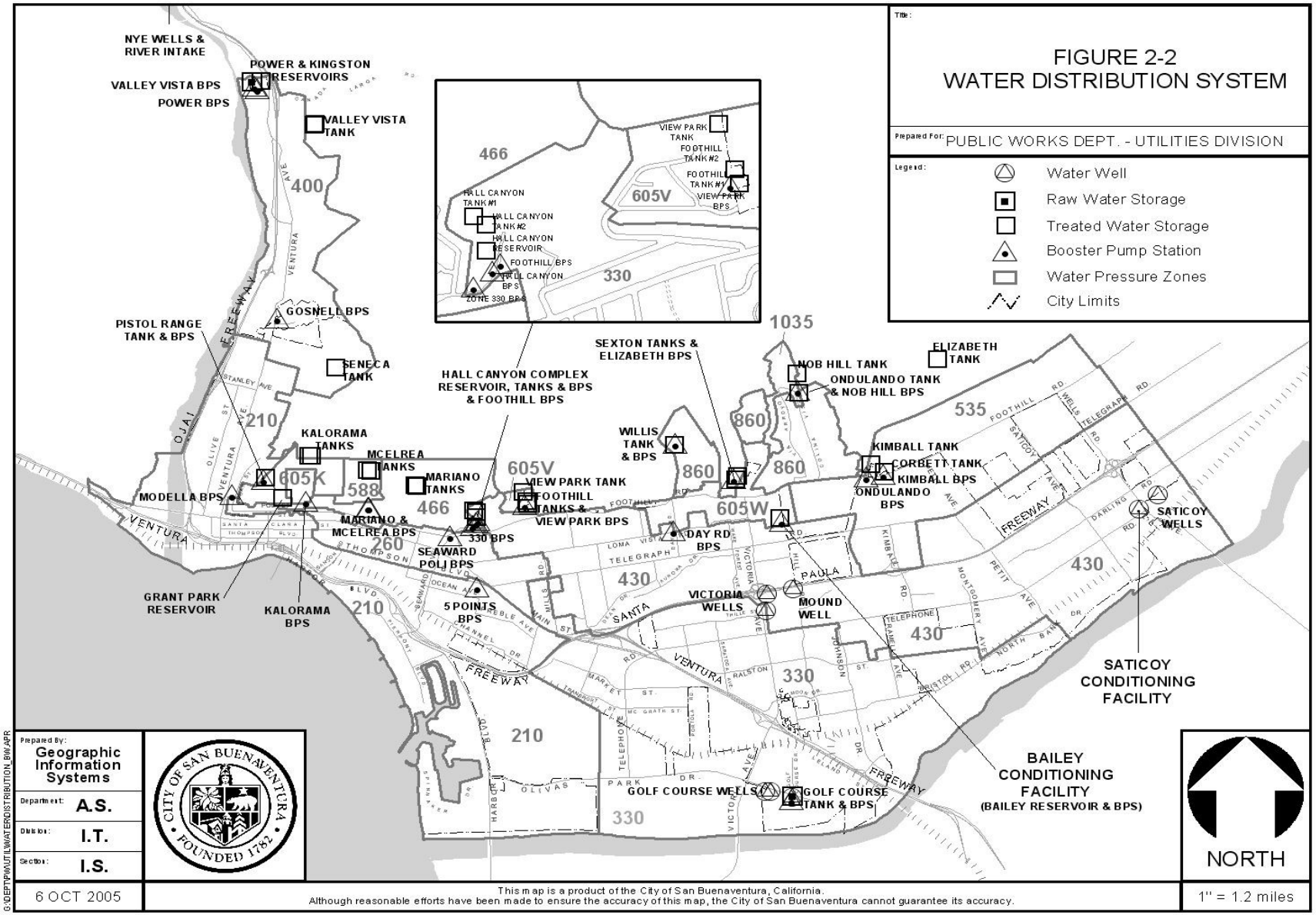
Title:
FIGURE 2-2
WATER DISTRIBUTION SYSTEM
Prepared For: PUBLIC WORKS DEPT. - UTILITIES DIVISION
Legend:
Water Well
Raw Water Storage
Treated Water Storage
Booster Pump Station
Water Pressure Zones
City Limits
NYE WELLS & RIVER INTAKE
POWER & KINGSTON RESERVOIRS
VALLEY VISTA BPS
POWER BPS
VALLEY VISTA TANK
GOSNELL BPS
PISTOL RANGE TANK & BPS
SENECA TANK
HALL CANYON COMPLEX RESERVOIR, TANKS & BPS & FOOTHILL BPS
SEXTON TANKS & ELIZABETH BPS
ELIZABETH TANK
NOB HILL TANK
ONDULANDO TANK & NOB HILL BPS
KALORAMA TANKS
MCELREA TANKS
MARIANO TANKS
WILLIS TANK & BPS
KIMBALL TANK
CORBETT TANK
KIMBALL BPS
ONDULANDO BPS
MODELLA BPS
VIEW PARK TANK
FOOTHILL TANKS & VIEW PARK BPS
MARIANO & MCELREA BPS
330 BPS
SEAWARD POLJ BPS
DAY RD BPS
SATICOY WELLS
GRANT PARK RESERVOIR
KALORAMA BPS
5 POINTS BPS
VICTORIA WELLS
MOUND WELL
SATICOY CONDITIONING FACILITY
BAILEY CONDITIONING FACILITY (BAILEY RESERVOIR & BPS)
GOLF COURSE WELLS
GOLF COURSE TANK & BPS
466
400
605V
330
1035
860
535
210
605K
588
605W
260
430
NORTH
Prepared By:
Geographic Information Systems
Department: A.S.
Division: I.T.
Section: I.S.
CITY OF SAN BUENAVENTURA • FOUNDED 1782 •
6 OCT 2005
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Section 3 - Past, Current, and Projected Water Supply

The City receives its water supply from local groundwater basins, sub-surface water from the Ventura River and Lake Casitas.

There are presently five water sources that provide water to the City water system, with a new water source (located at Ventura County Yard), expected to be online by 2007.

- Casitas Municipal Water District (Casitas)
- Ventura River Surface Water Intake, Subsurface Water and Wells (Foster Park)
- Mound Groundwater Basin
- Oxnard Plain Groundwater Basin (Fox Canyon Aquifer)
- Santa Paula Groundwater Basin

The City also provides reclaimed water from the Ventura Water Reclamation Facility.

3.1 - Ground Water

Mound Groundwater Basin

Currently, two wells supply water from the Mound Groundwater Basin. Victoria Well No. 2, which was installed in 1995 and Mound Well No. 1, which began production in April 2003. Victoria Well No. 1, which was installed in 1982, is considered an inactive well at this time due to maintenance and water quality issues. Projected capital improvement projects for the Mound Basin include a new well and an upgrade to Victoria Well #2. A new well, Mound Well #2, is planned for the Mound Basin in the year 2010. The well design will be similar to Victoria Well No. 2 and is anticipated to have a capacity of approximately 2,500 to 3,000 gpm. In the future Victoria Well No. 2 will receive new electrical equipment to insure production reliability.

In March 1996 the City completed a project that included: 1) constructing Mound Basin monitoring wells at Camino Real Park and Marina Park; 2) developing a database from historical records, and 3) identifying potential surpluses within the basin. This project was performed in conjunction with the United Water Conservation District. A report compiled as part of that project indicated that historical data supports a basin yield of at least 8,000 AFY during drought conditions as long as pumpage is reduced during wet years to allow water levels to recover. It is anticipated that the basin will be able to sustain a higher yield (at least 10,000 AF during drought periods), provided that future wells are located so as not to adversely impact the existing Mound Basin Wells.

For this report, using data from Victoria Well No. 2 and Mound Well No. 1, the future water supply from the Mound Basin is assumed to be 5,700 AFY based on 75 percent of the current pumping capacity of 7,600 AFY. A ten-year historic annual production for the Mound Basin is listed in Table 3-1.

Table 3-1

Annual Production for the Mound Basin

Year	Production (AF)
1995	2,169
1996	2,789
1997	213
1998	802
1999	3,954
2000	4,579
2001	4,030
2002	3,721
2003	5,546
2004	4,773

Notes:

1. Figures are from City water production records.
2. Well production for 1997 and 1998 was reduced as more water was taken from Lake Casitas because of the City's Minimum Purchase Agreement, and Victoria Wells were off due to the Bailey Plant expansion.

Oxnard Plain Groundwater Basin

Wells near the Buenaventura Golf Course have drawn from the Oxnard Plain Groundwater Basin since 1961. Currently, two wells produce potable water for the City's system with a third well out of service for rehabilitation. This third well is used as an emergency source and will only return to service during a drought. These wells pump from the Fox Canyon aquifer of the Oxnard Plain Groundwater Basin. Average annual yield from the golf course wells over the past 10 years has been about 2,500 AFY.

The Fox Canyon Groundwater Management Agency (GMA) was created by state legislation in 1982 to manage local groundwater resources in a manner to reduce overdraft of the Oxnard Plain and stop seawater intrusion. A major goal of the GMA is to regulate and reduce future extractions of groundwater from the Oxnard Plain aquifers, in order to operate and restore the basin to a safe yield. In August 1990, the GMA passed Ordinance No. 5, which requires existing groundwater users to reduce their future well water extractions by five percent every five years until a 25 percent reduction is reached by the year 2010. Long-term production will be about 4,100 AF per year. The GMA's groundwater management plan and additional information is located at www.countyofventura.org/dept under Public Works Agency. Appendix A reflects the latest GMA Ordinance (No. 8).

The City's baseline allocation was set by the GMA at 5,459 AFY, which was the average extraction from the Golf Course Wells for the period 1985 to 1989. Beginning in 1992, baseline extractions set by the GMA will be reduced in five percent increments until a 25 percent reduction is achieved in 2010 by all users. It is assumed by the GMA that the 25 percent reduction and improved irrigation efficiencies by agriculture will reduce consumption to meet basin safe yield. The City's supply from this source under this plan is shown in Table 3-2.

Table 3-2

City of San Buenaventura
Projected GMA Extraction Reductions

Year	Percent of Baseline	Allowed Extraction (AFY)
Baseline		Actual
Prior to 1992	100	5,459
1992 - 1994	95	5,186
1995 - 1999	90	4,913
2000 - 2005	85	4,640
2006 - 2009	80	4,367
2010 - 2040	75	4,094

Notes:

1. Baseline allocation is the average of Golf Course Well extractions from 1985 through 1989.
2. On December 15, 2004 the Fox Canyon GMA Board delayed the 5% cutback for CY 2005 by one year. CY 2005 extraction will remain the same as CY 2004. (Appendix A)

Following wet weather conditions, water levels in the City's groundwater basins rise significantly. Reduced water demands reflect a reduction in well production than their assigned historical allocation, which has allowed the City to accumulate 35,447 AF credits in the GMA bank as of December 31, 2004. This storage bank makes it possible for the City to implement operational procedures that will allow the use of its groundwater supplies up to safe yield levels, and to use its banked groundwater credits as an additional supply in the event of a drought. If the City were to use its banked water, it is estimated that the City could extract as much as 5,600 AFY based on 75% of the current pumping capacity of 7,500 AFY. However, for this report, future supply is conservatively based on GMA restricted extraction limits listed in Table 3-2.

Santa Paula Groundwater Basin

The Saticoy Water System acquired by the City in 1968 included Saticoy Well No. 1, which draws from the Santa Paula Basin. Due to casing failure, the well was destroyed and replaced in 1991 with a new well designated as Saticoy Well No. 2. This was placed in the same general location. In May 2003 Saticoy Well No. 2 was rehabilitated. The well capacity was reduced to 1,800 gpm. The original well construction was incapable of pumping properly at higher flows. Pumping capacity within the Santa Paula Basin is currently 2,200 AFY based on 75% of the current pumping capacity of 2,900 AFY. However, projected 2005 year-end actuals reflect 91% (2,600 AFY) of pumping capacity. Water from Saticoy Well No. 2 is treated by an iron/manganese conditioning facility.

Recent production in the Santa Paula Groundwater Basin has been:

Table 3-3

Santa Paula Groundwater Basin - Production

Year	Production (AF)
1995	2,594
1996	1,599
1997	2,025
1998	1,033
1999	1,669
2000	1,698
2001	2,006
2002	1,157
2003	316
2004	2,183

The City is moving forward with constructing Saticoy Well No. 3 (completion anticipated 2007), which will improve the water supply to the Saticoy Treatment Plant. It is expected that Saticoy Well No. 3 will have a pumping capacity of 3,000 AFY based on 75% of the planned pumping capacity of 4,000 AFY. Total pumping capacity within the basin is anticipated to reach 5,200 AFY, based on 75% of pumping capacity, by 2007.

In March 1996, the City ended a five-year stalemate over the future use of the Santa Paula Basin. Under an agreement with the United Water Conservation District and the Santa Paula Pumpers Association (an association of ranchers and businesses), the City can pump on average 3,000 AFY from the Santa Paula Basin. The City is not limited to this allocation in any single year, but may produce seven times its average annual allocation (21,000 AF) over any running seven-year period. In addition, the City may pump an additional 3,000 AFY in case of an emergency resulting from a long-term drought situation.

There are plans to expand the Saticoy Conditioning Facility's capacity in 2008 allowing two wells to run together at the same time. The higher output will provide additional supply to the 430-pressure zone, where demand may increase due to proposed development.

For purposes of this plan, the future annual production (2010 forward) from the Saticoy Wellfield is estimated to be 3,000 AFY, which is about 75 percent of the maximum design pump capacity (2,500 gpm) for one well.

Saticoy County Yard Well

The County of Ventura has relocated their maintenance yard to a site within the Saticoy Community contiguous to the City's water service area. In exchange for extraterritorial water service, the County has provided the City a well to offset their water demand. The well is expected to provide not only production capacity for serving the maintenance yard, but also significant additional system capacity. This well will pump from the United Forebay Basin. This additional supply will be used to offset the loss of production capacity that occurs from the Ventura River supply during dry weather and emergency conditions. The Saticoy County Yard Well is anticipated to begin production in 2007, with an estimated 75 percent of design production capacity of 2,400 AFY. The water demand for the maintenance yard is estimated to be 20 AFY.

3.2 - Local Surface Water

Casitas Municipal Water District (Casitas)

The western portion of the City is within Casitas' service area (see Figure 1-1). Approximately 30 percent of the City's water accounts are located within the Casitas service area. The City currently purchases water from Casitas (see Table 3-4 for historical water deliveries). Casitas delivers water to its customers from Lake Casitas located approximately 10 miles northwest of the City, which stores storm water runoff from local watersheds. Casitas supplies potable water to agricultural, domestic, municipal, and industrial users within its service area. The Casitas service area includes the Ojai Valley, the western part of the City, and the coastal area between the City and Santa Barbara County. Use of Casitas water is restricted to areas within its boundaries.

The "safe yield" of Lake Casitas is defined to be the amount of water that can be removed from the lake each year without excessive risk that the lake will become dry. The safe yield of Lake Casitas based on a December 7, 2004 updated study, is now 19,780 AFY during a 15 year drought recovery period and 20,840 during a 21 year drought period.

To maintain the future operation of Lake Casitas at safe yield, Casitas has established an allocation program for its customers in 1992. The City's allocation can be as high as the in-District demand for Stage I (wet or average year), or reduced to 7,090 AFY for

Stage 2 (dry conditions) and further incrementally reduced (stages 3 and 4) to 4,960 AFY for Stage 5 (extremely dry conditions). Stage 2 is initiated when Lake Casitas storage drops below 95,000 AF and Stage 5 when levels drop below 65,000 AF. The lower allocation remains in effect until the storage is recovered to 90,000 AF. Total lake storage as of August 2005 was 242,600 AF. A possible future impact to the multistage allocation system may be the operation of the fish ladder at the Robles Diversion. This may limit the amount of water available to the City.

In July 1995, the City signed an agreement with Casitas establishing the City's minimum annual purchase at 6,000 acre-feet per year (AFY), which is subject to the allocation program described above during drought periods. For this report the projected water supply available, for in-district use, from Casitas is anticipated to be 8,000 AFY.

Table 3-4 reflects historical water purchases from Casitas.

Table 3-4

Water Deliveries - Casitas

Year	Deliveries (AF)
1995	1,622
1996	4,456
1997	7,089
1998	4,328
1999	7,061
2000	5,836
2001	6,292
2002	7,127
2003	4,912
2004	6,833

Ventura River

Surface water from the Ventura River is diverted through the City's Foster Park facilities. The surface diversion, subsurface intake, and four shallow wells within the Ventura River collect water. Production from this source is a function of several factors including diversion capacity, local hydrology, environmental impacts, and the storage capacity of the Ventura River alluvium and upstream diversions. Table 3-5 reflects the recent production from this water source.

Table 3-5

Water Production - Ventura River

Year	Production (AF)
1995	9,042
1996	7,926
1997	7,052
1998	8,069
1999	6,419
2000	6,779
2001	5,727
2002	5,951
2003	6,722
2004	6,118

The Ventura River water source is very dependent upon local hydrology. Currently, the Surface Diversion at Foster Park is unused due to the natural channeling of the active river channel. Each year the flows change the position of the active river channel in relation to the intake structure. According to a model of the Ventura River developed in 1984 and modified in 1992, the Ventura River Basin fills after one or more years of above average rainfall. Once full, it takes three successive years of drought, with below average rainfall to deplete the river basin subsurface storage and cause river water production to drop until the drought ends.

The Nye Wells in the Ventura River produce water throughout the year. However, due to storm flows the wells are subject to inundation and erosion. Recently, the 2005 winter storms destroyed Nye Well IA and damaged Nye Well 2, 8, and 7. These wells are currently in repair but it is anticipated that they will be back in full operation by the summer of 2006. For this report a calendar year 2005 estimate of 2,400 A/F will reflect the annual water supply for Ventura River.

The City's current Capital Improvement Project CIP# 73022 - Foster Park Wellfield may allow replacing the production capacity of the surface diversion with three new wells (Nye Well #10, 411, and #12). CIP# 73009 Ave. Water Treatment Plant/Foster Park Phase 2 may add two additional wells (Nye Well #9 and #13). As part of this development, a reevaluation of the environmental impact report is anticipated along with an update to the City's Water System Master Plan in FY 2005-2006. This reevaluation will identify the exact number of wells and where the wells will be placed; along with production and cost estimates. Construction could begin as early as FY 2007-2008.

It is stated in the "Comprehensive Water Resources Management Plan, December, 1994," (copy in Appendix B) that the yearly yield is between 700 and 11,000 AF per year. For this report the average long-term water production of 6,700 AFY will be used,

in future years, and is based on the Evaluation of Long Term Alternative Water Sources, James M. Montgomery, June 1993 and our current water production facilities.

3.3 - Imported Water

State Water Project (SWP)

In 1964, Ventura County Flood Control District contracted with the State of California for future delivery of up to 20,000 AFY of SWP water to Ventura County. In 1971, administration of the contract for SWP water was assigned to Casitas. The City executed an agreement in 1971 with Casitas and the Department of Water Resources (DWR) to allocate 10,000 AFY of the entitlement to the City. This obligation extends to the year 2038. In the contract with Casitas, the City retains full authority and responsibility for advance scheduling of their state water and for determining the point and method of delivery. To date, the City has not received delivery of its allotment, and it is not certain if or when facilities will be constructed to transport SWP water to the City. In 1998 the City became a signatory to the SWP Monterey Amendment. The Monterey Amendment would allow the City, with other contractors to sell surplus water back to the state; however, litigation has prevented the terms of the amendment from being fully acted upon.

The City, Casitas, and United (referred to as the Joint Agencies) pay annual entitlement fees to DWR, which cover construction costs for SWP facilities and administration to deliver allotments of water throughout the state. In addition, the citizens of Ventura voted November 3, 1993 in favor of desalinating seawater over importing water through the SWP, as the preferred supplemental water supply option. However, based on the City Attorney's review of the City's entitlement, the City cannot unilaterally end its involvement in the SWP's financial obligations and entitlement without great risk. There are two options that exist for the City with respect to its SWP entitlement: solicit other Ventura County agencies to accept the City's financial obligations for its entitlement, or maintain the SWP entitlement pending future decisions on water supply. Per the 1994 Comprehensive Water Resources Management Plan (see Appendix B):

> "At this time, the potential future benefit of using the SWP entitlement for the City's advantage outweighs the cost and risk of abandoning the City's investment in this option. The decision concerning the ultimate disposition of the City's SWP entitlement would be more appropriately made when the need for a supplemental water supply is imminent. Since the City will not need a supplemental water supply for at least 15 years, using the entitlement on a short-term basis to either improve the City s water supply conditions or minimize the financial impact of keeping the entitlement should be pursued. Beneficial uses or alternatives for the City's SWP entitlement may be found prior to the decision on how this source is or is not incorporated into the City's long-term supplemental water supply."

3.4 - Recycled Water

The City also operates the Ventura Water Reclamation Facility (VWRF) with secondary capacity to 14-million gallons per day (MGD). The tertiary-level treatment plant produces an effluent that meets the requirements of Title 22 of the California Administrative Code. The plant capacity is approximately 10.5 MGD due to increased regulatory demands (see Sec. 7-3). The City utilizes recycled water from its reclamation facility to augment the water supply. Recycled water is used to irrigate City and private landscaping in the area and the Buenaventura and Olivas Park municipal golf courses. The remaining treated effluent is discharged to the Santa Clara River Estuary. The City's reclaimed water system consists of five miles of pipelines and two pumping facilities.

3.5 - Water Source Supply Summary

Table 3-6 summarizes historic and projected water supply (non-drought conditions) from the City's water sources. The projected figures are based on the water supply available from each source and do not necessarily represent amounts currently produced. It should be noted that historical delivery figures are well below the capacity of the available sources, however, actual future water supply levels in any given year may be significantly higher or lower than average.

Table 3-6
Historic and Projected Water Source Supply Availability (Acre Feet) [1]

Year	Surface Water		Groundwater				Total Water Supply
	Lake Casitas [2]	Ventura River [3]	Mound Basin [4]	Oxnard Plain Basin [5]	Santa Paula Basin [6]	Saticoy Country Yard Well [7]	
1980	7,544	7,276	0	5,198	2,129		22,147
1985	9,099	5,493	2,360	6,172	46		23,170
1990	6,175	2,859	4,365	5,749	0		19,148
1995	1,622	9,042	2,169	2,603	2,594		18,030
2000	5,836	6,779	4,579	2,674	1,698		21,566
2001	6,292	5,727	4,030	905	2,006		18,960
2002	7,127	5,951	3,721	1,978	1,157		19,934
2003	4,912	6,722	5,546	2,898	316		20,394
2004	6,833	6,118	4,773	2,391	2,183		22,298
2005	8,000	2,400	5,700	4,600	2,600		23,300
2010	8,000	6,700	5,700	4,100	3,000	2,400	29,900
2015	8,000	6,700	5,700	4,100	3,000	2,400	29,900
2020	8,000	6,700	5,700	4,100	3,000	2,400	29,900
2025	8,000	6,700	5,700	4,100	3,000	2,400	29,900

Notes:

[1] Includes treated and raw water; excludes reclaimed water supply.

[2] Lake Casitas is the City's total past supply including raw water and oil users; projected supply is the City's anticipated water availability for In-district use.

[3] Ventura River future supply is the average long-term production per the Evaluation of Long Term Alternative Water Sources, James M. Montgomery, June 1993. Reduced value in 2005 reflect lost and damaged wells caused by 2005 storm.

[4] Mound Basin future supply is 75 percent of well pump capacity within basin.

[5] Oxnard Plain Basin future supply is based on GMA restricted extraction limits (rounded to nearest 100 AF from Table 3-2).

[6] Santa Paula Basin 2005 water supply reflects estimated year-end actuals. Future production reflects 75% of maximum design capacity for one well at 2500 gpm.

[7] Saticoy County Yard Well is 75% of well pump capacity.

3.6 - Supplemental Water Supplies

Recently, the City has entered into a contract with RBF Consultants to update the City's Water System Master Plan during Fiscal Year 2005 - 2006. This update along with the City's current Capital Improvement Projects (CIP) will identify improvements needed to increase production capacity and storage, improve our ability to move water from the diverse sources of supply to all points of use, maintain water quality at its current level, reliability and safety. The City continues to implement improvements to the water system and update the five year CIP plan, which is essential to meet future water production, storage and transport needs in non-drought and drought conditions. The Capital Improvement Projects and their anticipated completion dates are identified on Table 3-7. Future water supply projects are further identified on Table 3-8.

As mentioned earlier the City's State Water Entitlement is a long-term water supply option. In addition, the preferred supplemental supply option is seawater desalination. On November 3, 1993 the citizens of Ventura voted in favor of desalinating seawater over importing water through the SWP. The City hired an engineering consultant to evaluate the technical, economic and environmental feasibility of building a desalination plant. Per the 1994 Comprehensive Water Resources Management Plan (Appendix B), it was concluded that the City will not need an additional water supply source for the next approximately fifteen (15) years. Therefore, there is no technical benefit at this time for the City to make a decision as to long term additional water supply options based on current circumstances. However, with the update of the City's Water System Master Plan, long-term water supply options will be reevaluated. In the short-term, should there be a significant drought, the analysis in Section 6.3 indicates that the use of banked water in the Fox Canyon Aquifer, along with water conservation, and implementation of the above CIP projects should enable the City to meet its current and anticipated demands.

3.7 - Water Quality

Ventura's Primary Drinking Water Standards (PDWS) continues to meet or exceed state and federal standards. Whether the water source is from the Ventura River, Casitas or groundwater basins all Ventura water customers receive treated water. As stated in the 2005 Water Consumer Confidence Report, the City continues to monitor water quality along the Ventura River and San Antonio Creek at 15 sites for Cryptosporidium, Giardia, Bacteria, Nutrients, Bromide, Total Organic Carbon, Chloride and Conductivity. The City will update a Sanitary Survey of the Ventura River Lower Watershed in 2006. In addition, the City will continue to conduct tests to optimize its treatment with corrosion inhibitors in an effort to further reduce lead and copper with respect to meeting EPA standards and evaluating Public Health Goals every three years.

The City's water sources enter the distribution system at various points throughout the City. Therefore, the quality of delivered water is different throughout the City. The City's secondary standard water quality goal is to reach an average total dissolved solids (TDS) concentration of 800 mg/l. TDS is a parameter used to characterize the

water quality hardness. Secondary drinking water standards are defined for TDS as aesthetics that impact the quality of the water such as appearance, odor, and taste. Table 3-9 reflects the secondary standard MCL by water source over the past five years. The City's west end receives better quality water from Lake Casitas and the Ventura River than from the eastside wells. To satisfy the TDS water quality goals established by the City Council in the Comprehensive Water Resources Management Plan Update, additional westside water supplies or treatment of eastside sources would be required. A summary of Ventura's water quality is identified in the Water Consumer Confidence Report for 2005 and is enclosed as Appendix C.

Table 3-7
2005-2010 CIP Project Schedule

Program #	Project Description	Fiscal Year 2004-05	Fiscal Year 2005-06	Fiscal Year 2006-07	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10
	WATER FACILITY PROJECTS						
73009	Avenue WTP/Foster Park Phase 2						
73013	Bailey Control and Equipment Upgrade						
73015	Victoria Well #2 Upgrade						
73018	Golf Course Well #7						
73020	Mound Well #2						
73022	Foster Park Wellfield						
97521	Saticoy Conditioning Facility Renovation						
97850	Avenue Water Treatment Plant						
97879	New Tank-Arroyo Verde (605 Zone)						
97887	Booster Pump Station Upgrades						
97891	Chlorination/Chloramination Modifications						
97896	Golf Course BPS & Wells Upgrade						
97898	Booster Pump Station Fixed Emergency Power						
97899	Saticoy Well #3						
	WATERLINE PROJECTS						
73004	Grant Park Water System Improvements						
73016	Water Distribution Pressure Stations						
73917	Downtown Water Main Replacement						
73019	Market Street Area Waterline Replacement						
73023	Waterline - Olivas East of Harbor Blvd.						
97841	430 Water Pressure Zone Reservoir and Pipeline						
97864	Waterline - Loma Vista 210/430 Tie-In (3 lines)						
97867	Waterline Replacement Foster/Hillside 466/360R						
97868	Downtown Hillside Waterline Replacement						
97870	Seaward Avenue / 101 Waterline						
97878	Waterline Replacement Ondulando Area						
97884	Waterline Replacement Poli Street						
97889	Waterline - Harbor Blvd.						
97890	Waterline Replacement Montalvo Area						
97893	Waterline-Northbank (West)						
97894	Waterline-Northbank (East)						
97895	Waterline Extension-Telephone (210/330)						
97897	Dead-End Water Main Connections						

Table 3-8

Future Water Supply Projects

Program #	Water Supply Projects	Projected Start Date	Projected End Date	Normal-Year AF Supply	Single-Dry[1] Year Yield AF	Multiple Dry[2] Year 1 AF	Multiple Dry[3] Year 2 AF	Multiple Dry[4] Year 3 AF
97899	Saticoy Well #3	FY 2004-05	FY 2006-07	3,000	2,250	2,250	1,125	844
	Saticoy County Yard Well	FY 2004-05	FY 2006-07	2,400	1,800	1,800	900	675
		TOTAL A/F		5,400	4,050	4,050	2,025	1,519

Notes:

[1] Single Dry Year is estimated at 75% of Normal Year
[2] Year 1 is estimated at 75% of Normal Year
[3] Year 2 is 50% of Year 1
[4] Year 3 is 75% of Year 2

Project Description:

97899 Saticoy Well #3 — This new well and transmission main will provide backup, redundancy and drought proof capabilities to the water system. This well will have a capacity of approximately 2,500 gpm.

Saticoy County Yard Well — This new well is located in the County of Ventura's maintenance yard within the Saticoy Community. In exchange for extraterritorial water service the County has provided this well to the City. This well shall service the County maintenance yard and provide additional system capacity.

Table 3-9

Water Quality - Secondary Standards
Total Dissolved Solids

Water Source	SMCL Goal	2000	2001	2002	2003	2004	5 Year Average
Lake Casitas	1,000	340	370	340	330	350	346
Groundwater	1,000	1,090	1,133	1,167	1,202	1,242	1,167
Ventura River	1,000	522	498	551	597	548	543

Note: Secondary Maximum Contaminant Level (SMCL) or the highest level of a contaminant that is allowed in drinking water. Secondary MCLs for TDS are set to protect odor, taste and appearance of drinking water.

Section 4 - Past, Current, and Projected Water Use

4.1 - Water Demand

Historic Water Demand

The City's water system provides water to residential, commercial, industrial, petroleum recovery, irrigation, and municipal users. Raw water usage is injected into the ground for oil recovery and used by agriculture customers. All other customers receive treated potable water.

Table 4-1 shows historical water production, consumption, and population trends within the City. Water production is the total amount of water supplied to the water system from the City's various water sources. Water consumption is the water actually used by City water customers. Any difference between production and consumption is known as unaccounted system loss. These losses could be from slow running meters, pipe leakage, fire hydrant testing, etc.

Water consumption within the City (excluding raw water/oil company use) has decreased in recent years as shown by the per capita use figures in Table 4-1. The annual per capita usage from 1940 to 1970 averaged about 0.31 acre-feet per person (AF/capita). In the period 1985-1989 (pre-mandatory water conservation), the annual per capita use averaged about 0.22 AF/capita. In the period 1994-2004 (post mandatory water conservation), the per capita figure dropped to an average of 0.18 AF/capita. This decrease in per capita consumption is the result of plumbing improvements such as low flow fixtures and low water consuming appliances in some existing and all new housing; and an active water conservation program adopted by the City in 1975 and further strengthened with mandatory regulations in 1990. Mandatory regulations were lifted in 1993, however water conservation efforts remain very effective.

Table 4-1

Historic Water Production and Population[6]

Year	Total Prod.[1] (AF)	Raw Water Use (AF)	Treated Water Use[2] (AF)	Est. Pop. Served by Water System[3]	Per Capita Use[4] (AF)	Annual Rainfall (in.)[5]
1940	4,240	0	4,240	13,264	0.320	12.54
1950	5,307	0	5,307	16,534	0.321	13.34
1960	8,832	0	8,832	29,114	0.303	12.08
1970	21,524	4,473	17,051	57,964	0.294	13.92
1980	22,147	4,766	17,381	74,393	0.233	24.78
1990	19,148	2,317	16,831	94,856	0.177	5.53
2000	21,566	1,129	20,437	103,238	0.198	17.04
2001	18,960	1,144	17,816	104,153	0.171	23.22
2002	19,934	968	18,966	105,267	0.180	7.24
2003	20,394	846	19,548	106,782	0.183	20.06
2004	22,298	940	21,358	109,002	0.196	11.78
Average	1940-70	Historical			0.31	
Average	1985-89	Pre-Mandatory Water Conservation			0.22	
Average	1994-2004	Post-Mandatory Water Conservation			0.18	

Notes:

[1] Total production includes all water produced by the City, including raw water/oil use.

[2] Treated water use is total production less raw water use.

[3] Refer to Table 2-1

[4] Per capita use excludes raw water (treated water use/population).

[5] Annual rainfall is the average of measured precipitation from four rain gauge stations throughout the City, (Stations #66, #122, #167 and #223), as provided by the Ventura County Flood Control District web site (www.countyofventura.org)

[6] 1940-90 figures are from the City of San Buenaventura, "Water System Operational Evaluation and Improvement Program," Boyle Engineering Corporation, June 1993, Table ES-1.

A breakdown of water consumption from fiscal year water billing records for each major user group is shown in Table 4-2. Consumption data allows the City to accurately monitor usage per user type and foresee developing trends in water demand.

Table 4-2

Historic Fiscal Year Water Consumption by User Group In Acre Feet

	FY 00-01	%	FY 01-02	%	FY 02-03	%	FY 03-04	%	FY 04-05	%	Connections FY 04-05
Single Family	7,122	41%	7,297	42%	7,459	42%	7,556	43%	7,527	42%	22,800
Multi Family	3,846	22%	3,853	22%	3,752	21%	3,770	22%	3,887	22%	2,269
Commercial	3,833	22%	3,887	23%	3,951	22%	4,031	23%	4,279	24%	2,536
Industrial	276	2%	241	1%	296	2%	233	1%	163	1%	9
Institutional	637	4%	617	4%	619	3%	607	3%	607	3%	252
Landscape	320	2%	304	2%	431	2%	373	2%	369	2%	202
Agriculture	87	1%	96	1%	76	0%	79	0%	63	0%	9
Other	1,055	6%	967	6%	1,129	6%	762	4%	1,002	6%	2,876
Total	17,177	100%	17,262	100%	17,714	100%	17,411	100%	17,897	100%	30,953

Population Projections

The City's estimated population growth for the water service area is shown in Table 4-3. The source is the California State Department of Finance, with future population projection reflecting a 0.88% annual growth rate, which is equivalent to the City's annual growth over the past 10 years. In addition, future population for the unincorporated areas served by the City's water system is based on 2005 customer count with a growth rate of 0.35%. Population estimates were extrapolated to fit 5 year increments. It is important to note that these figures are not intended to represent support for nor reflect any commitment to this level of growth. Rather, it is to provide a safe margin in planning for long-term water improvements that might be needed given the amount of growth that could be allowed under the City's 2005 Environmental Impact Report (EIR) for the updated General Plan. Included for comparison is the EIR population projection reflecting the two possible growth scenarios: (1) 1.14% annual population growth, which is equivalent to the annual growth rate in the City over the past 20 years; and (2) 0.88% annual population growth, which is equivalent to the annual growth over the past 10 years.

Table 4-3

Planning Area Population Projections

Year	Projected Population Planning Area	EIR Population @ 0.88%	EIR Population @ 1.14%
2005	109,812		
2010	114,629		
2015	119,659		
2020	124,913		
2025	130,400	126,153	133,160

Future Water Demand

For planning purposes, in 1990, the City used 0.22 AF of water per capita per year based on the average pre-mandatory conservation per capita use data (See Table 4-1). Anticipated demand reductions, through long-term conservation programs, have lowered the per capita water usage factor. Estimated demand reductions due to conservation in 1990 were anticipated to be five percent in 1995 (0.209 per capita use), 10 percent in 2000 (0.198 per capita use), and 12 percent thereafter (0.194 per capita use). The figures in Table 4-1 show that the reductions assumed in 1990 have been exceeded and are now around 18 percent. Based on data from the past 11 years since mandatory conservation ended, the average per capita usage is 0.181 AFY. For the purpose of this report 0.18 AFY per capita will be used to estimate future water demands.

Raw water demand for oilfield injection has declined. Average raw water usage for the past 5 years was 1005 AFY. For purposes of this report future raw water demand of 1,000 AFY will be used.

Applying these per capita demand factors to the projected population provides an estimate of treated water demand for the next 20 years, as shown in Table 4-4.

Table 4-5 reflects a breakdown of water consumption over the next 20 years by major user group. User group distribution is based on previous five-year average (2000-2004) historical data.

Table 4-4
Projected Water Demand (Acre Feet)
(Normal Year, Weatherwise)

Year	Est. Water Service Area Pop.[1]	Per Capita Usage AFY[2]	Treated Water Demand[2]	Raw Water Demand	Total Water Demand
2005	109,812	0.18	19,766	1,000	20,766
2010	114,629	0.18	20,633	1,000	21,633
2015	119,659	0.18	21,539	1,000	22,539
2020	124,913	0.18	22,484	1,000	23,484
2025	130,400	0.18	23,472	1,000	24,472
2025[3]	126,153	0.18	22,708	1,000	23,708
2025[4]	133,160	0.18	23,969	1,000	24,969

Notes:

[1] Estimated planning area populations are from Table 4-3.
[2] Treated water demand is estimated population multiplied by 0.18 AF/capita based on 1994-2004 average post mandatory water conservation per capita use from Table 4-1.
[3] Reflects EIR 0.88% population estimate for the 2005 general plan.
[4] Reflects EIR 1.14% population estimate for the 2005 general plan.

Table 4-5

Projected Water Consumption in Acre Feet by User Groups

User Group	Projected %	YR 2005	YR 2010	YR 2015	YR 2020	YR 2025
Single Family	42.26%	8,776	9,142	9,525	9,924	10,342
Multi Family	21.85%	4,537	4,727	4,925	5,131	5,347
Commercial	22.84%	4,743	4,941	5,148	5,364	5,589
Industrial	1.39%	289	301	313	326	340
Institutional	3.53%	733	764	796	829	864
Landscape	2.05%	426	443	462	481	502
Agriculture	0.46%	96	100	104	108	113
Other	5.62%	1,167	1,216	1,267	1,320	1,375
Total	100%	20,766	21,633	22,539	23,484	24,472

4.2 - Residential Sector

The residential sector of the City is comprised of single and multi-family residential customers. Currently, there are approximately 22,856 single family and 2,270 multi-family residential customers. The latter represents 19,299 residential dwelling units. This difference between customer accounts and residential units illustrates the impact of master metering on apartments and condominiums, whereby one meter serves a number of units. This sector represents approximately 64% of the City's water consumption.

4.3 - Commercial Sector

The City contains several different types of commercial customers, including gas stations, large shopping complexes, auto dealerships, restaurants, business parks, office buildings, hotels, and hospitals (one private and one public) to name a few. The City includes several tourist driven businesses such as hotels, which benefit from the high volume of tourist traffic.

The largest commercial sector users are hotels and hospitals. The commercial sector accounts for approximately 23% of the City's water consumption.

4.4 - Industrial Sector

The City contains a relatively small industrial section. Aside from the oil industry accounts, most of the industrial sector is centered on food industries. The industrial sector utilizes 1% of the City's water demand.

4.5 - Institutional/Government Sector

The City's institutional and governmental sectors are relatively stable. The City is also the county seat and therefore contains a large government center and jail complex. In

addition, school facilities and churches are included in this sector. The Institutional/Government Sector utilizes approximately 4% of the water demand.

4.6 - Landscape/Agricultural/Other Sector

The City maintains 34 developed parks and 45 miles of linear parkways. In addition, there are two 18-hole tournament class public golf courses served by reclaimed water for all turf areas. The golf courses have potable water for the clubhouse, restrooms and drinking fountains and use reclaimed water for irrigation. Agriculture uses has a very low demand on water consumption at 0.46%. In total, the water demand for this sector of the City accounts for 8% of the City's water consumption.

4.7 - Supply and Demand Comparison

Water Supply Projection

Table 4-6 summarizes the City's projected water demand and supply through the year 2025. Additional future water supplies will not be needed under average non-drought weather conditions. However, to satisfy water quality goals established by the City Council in the Comprehensive Plan Update to the Year 2010 (less than 800 ppm Total Dissolved Solids (TDS) water quality throughout the entire City), additional water supplies beyond those indicated in Table 4-6 would be required.

Table 4-6
Summary of Projected Water Demand and Supply (Acre Feet)
(Non-Drought Conditions)

Year	Projected Planning Area Pop.[1]	Projected Water Demand[2]	Projected Water Supply[3]	Additional Water Supply Needed[4]
2005	109,812	20,766	23,300	None
2010	114,629	21,633	29,900	None
2015	119,659	22,539	29,900	None
2020	124,913	23,484	29,900	None
2025	130,400	24,472	29,900	None
2025[3]	126,153	23,708	29,900	None
2025[4]	133,160	24,969	29,900	None

Notes:

[1] Projected planning area population is from Table 4-3.
[2] Projected water demand is from Table 4-4.
[3] Projected water supply is from Table 3-6.
[4] Additional water supply needed is the projected water supply subtracted by the projected water demand.
[5] Reflects EIR 0.88% population estimate for the 2005 general plan.
[6] Reflects EIR 1.14% population estimate for the 2005 general plan.

4.8 - Future Supplemental Supply

The City will continue to implement improvements to our water system as previously stated in section 3.6. The 2006 update of the City's Water System Master Plan along with the City's current Capital Improvement Projects (CIP) will identify improvements needed to increase production capacity and storage, improve our ability to move water from the diverse sources of supply to all points of use, improve reliability and safety.

Water quality improvements are not being addressed in the 2006 Master Plan update. However, the City continues to implement improvements to the water system and update the five year CIP plan each year, which is essential to meet future water production, storage and transport needs in non-drought and drought conditions.

Along with the CIP programs the City will continue to pursue the following system efficiency improvements, which will increase the water system's capability of supporting increased demands in the future.

1. Continue to work with participating agencies on the Ventura River Watershed and Habitat Conservation Plans for Steelhead Trout.
2. Continue discussions with local agencies concerning our State Water Project Entitlement.
3. Continue work towards development of Santa Paula Basin Operational/Management Plan with United Water Conservation District & Santa Paula Pumpers Association.
4. Implement the recommendations in the West County Water Supply Reliability Study, which would provide an emergency interconnection between the Ventura and Oxnard water systems.
5. Work with the Casitas Municipal Water District to formally define the City's water service in the North Ventura Avenue area.

In addition, the 1994 Comprehensive Water Resources Management Plan also stated the following, "The City should have a program in place which can provide advance warning and a decision making process for the need of a supplemental water supply, whether the need be for drought-proofing or for long-term base-loaded supply. The program should include an annual review of critical water supply conditions with a biennial report provided to the Council in the fall of even numbered years. A ten-year projection should review critical water supply conditions including the production from the Ventura River, storage in Lake Casitas, the balance in the Fox Canyon GMA groundwater bank, the condition of the Mound and Santa Paula Basins, and the water demand in the City. Based on that projection, the Council will be asked to certify whether the then-existing water supply and planned improvements are sufficient to satisfy the City's water needs for the ensuing ten years." The above process has been in place since 1996, and is submitted biennially to the City Council. The last submittal was October 2004.

Section 5 - Water Conservation Programs

Since 1975 the City's water conservation program continues to be effective in controlling Ventura's water demand. The success is due impart to the continuing efforts by our customers to conserve water, the building and plumbing industries and the Ventura City Council's continuing support of conservation programs.

A requirement of the Urban Water Management Plan is to provide information related to each water Demand Management Measures (DDM). These include but are not limited to the following:

A. Water survey programs for single-family residential and multifamily residential customers.
B. Residential plumbing retrofit.
C. System water audits, leak detection, and repair.
D. Metering with commodity rates for all new connections and retrofit of existing connections.
E. Large Landscape conservation programs and incentives.
F. High-efficiency washing machine rebate programs.
G. Public information programs.
H. School education programs.
I. Conservation programs for commercial, industrial, and institutional accounts.
J. Wholesale agency programs.
K. Conservation pricing.
L. Water conservation coordinator.
M. Water waste prohibition.
N. Residential ultra-low-flush toilet replacement programs.

A discussion of the City's efforts to implement the DDMs is given in the section below. In addition, the City submits their Best Management Practices or DDMs activity report to the California Urban Water Conservation Council each year.

5.1 - BMP 1 - Water Survey Programs for Single Family and Multi Family Residential Customers

Water Audits

The City has an information campaign, which notifies water customers of a water audit program. The City's Utilities Office will issue notifications to customers who show a high water consumption on their utility bill. Customers are encouraged to contact the City to request a water audit. The City investigates both exterior and interior water usage, identifies areas of potential over-use and possible leaks and encourages retrofit of plumbing fixtures inside and outside where needed. In fiscal year 2004-2005 the City performed 1,301 residential audits.

The City will continue to perform residential audits annually. Audits would include the following:

- Inspection of customer's water system.
- Evaluation of customer's water use both inside and outside.
- Recommendation of measures to reduce water use.
- Information on new water saving devices.
- Education on general water conservation practices.

5.2 - BMP 2 - Residential Plumbing Retrofit

The City currently supplies low flow (2.0 gpm) showerheads and toilet tank displacement bags, kitchen and bath aerators, and toilet dye tablets to customers on request. In the past five years the City has distributed over 8,000 devices to Ventura customers. The City intends to continue this program.

5.3 - BMP 3 - System Water Audits, Leak Detection and Repair

Metered Water Use

All water customers in the City service area are metered. All fire lines are fitted with bypass detection meters to ensure that no water is inadvertently released or unaccounted. All construction water is assigned a temporary meter, no matter how small the job. This is done through a permit process.

Source Meters

The City meters all water sources into the water system and will continue to do so as new water sources are developed. All source meters are regularly maintained and calibrated.

Meter Testing and Calibration

All City and customer meters are tested, calibrated, or replaced on a regular basis. The City has its own meter shop, large meter testing truck, and maintains detailed meter test records. The City can currently test meters 6 inches and smaller.

The City has a replacement program for meters 2 inches and smaller. Service meters less than two inches, if assumed to be in error are tested, and if found to be out of calibration are replaced, or if under 10 years of age they may be rebuilt under warranty. All small meters are replaced after 15 years of age regardless of condition. The City has established a large meter testing program for meters larger than two inches. The City tests and calibrates all large service meters annually. Records are maintained to chart meter performance. The City's annual meter testing and replacement programs will help insure the accurate accounting of water sales and source production.

Computer Controlled Water System

The City has a SCADA computer monitoring and control system, which provides automatic input readings from pump stations, reservoirs, source meters, and wells. This data is helpful in determining trends and demands within specific areas of the water service area. Pumps are controlled through the SCADA system primarily based upon reservoir levels. Future water system expansion will include additional SCADA expansion.

Leak Detection

The City has a leak detection program to aid the City and customers in identifying water loss. City personnel are trained in the procedures of leak detection surveys and the use of up-to-date detection equipment. Recently, the City purchased two Meter Master Flow Recorders to support our customer service representatives in leak detection. The leak detection program is a continuous effort by the City to minimize water loss and complement the City's water audit program.

Pipeline and Facility Replacement Program

The City is committed to the maintenance and improvement of its water facilities. The current Capital Improvement Program includes annual replacement of older water pipelines within the City service area. This years Capital Improvement Projects identifies sixteen waterline replacement projects, with an estimated value of $31.2 million dollars over the next five to ten years. Priorities for replacement are based upon the age of the line, leak history, and future street improvements. The City is committed to this program to help reduce the amount of unaccounted water lost in the distribution system and replace old pipes before they might leak, thereby supporting water conservation efforts. In 2004, the City completed a Corrosion Study that recommended replacing certain cast iron pipelines, which have a history of leakage.

Unaccounted System Losses

The City conducts an annual system check of unaccounted-for-water loss by comparing source production and customer metered records. All water suppliers have additional water uses and unaccounted for system losses. This includes, but is not limited to main waterline flushing, water rights, water main breaks/leaks, firefighting, and water tank/plant maintenance just to name a few. It should be noted that the City has averaged 13.0% unaccounted-for-water loss over the last ten years. However, recent results for fiscal year 2004 - 2005 reflect 9.74%. This percent is relatively low when considering the age and size of the City's water system. This monitoring is an ongoing program.

5.4 - BMP 4 - Metering with Commodity Rates

Metering

All uses (with the exception of fire hydrant testing) are metered. This includes public landscaping and construction water.

Commodity Rates

All accounts have commodity rates whereby the customers pay based upon all water used per HCF. Since rates are dependent on water used, this promotes water conservation. The FY 2005-2006 bi-monthly water rates in Hundred Cubic Feet (HCF) are shown in Table 5-1.

Table 5-1

FY 2005-2006 Water Rates

Class	Tier	City Rate HCF	County Rate HCF	Single Family Units-HCF	Multiple Family Units-HCF	Other Accounts
Residential	1	$1.60	$2.71	1-16	1-10	Tier Rate
	2	$2.11	$3.59	17-42	11-24	Tier Rate
	3	$3.39	$5.76	43+	25+	Tier Rate
Non Residential	-	$2.11	$3.59			Flat Rate
Raw Water, Irrigation, & Municipal Parks		$1.11	$1.11			Flat Rate
Reclaimed Water		$0.48	$0.48			Flat Rate

The above rates apply to City and County customers. For multi-family units with master meters, the allowable water units are multiplied by the number of residential units. Even accounting for higher summer use, the majority of residential customers do not have to pay the third tier, which is intended for the highest water-use customers. Reclaimed water rates are quite low and provide an incentive to customers to use it if possible. This is an ongoing program.

5.5 - BMP 5 - Large Landscape Conservation Programs

The City supports large landscape audits to improve water efficiency. Currently, our customer service team provides on-site support to the customer upon request. Working with the customer and often times with the landscape contractor, they help identify

water loss problems such as leaky pipes, irrigation timing problems and irrigation system checks. This is an ongoing program.

All new commercial/industrial or public landscapes are required to be low water use design and use automatic controls for oft peak irrigation and other conservation measures. All landscaping, including residential, is to be reviewed against specified guidelines (Appendix E). This is an ongoing program and is part of the City plan review process.

5.6 - BMP 6 - High Efficiency Washing Machine Rebate

Currently, the City has not established funding to implement this rebate program.

5.7 - BMP 7 - Public Information

The City has compiled and developed many pamphlets for dissemination to customers and the general public. These pamphlets are designed to educate and assist the public on water conservation and how to become efficient water users. Information is directed mainly to residential customers with the assumption that conservation will be carried into the work place. The following is a list of informational materials currently disseminated to customers upon request and at public events.

- Ventura Public Works Utilities - Here for you
- Water Saving Plants
- Lawn Watering Guide
- Annual Consumer Notification Water Quality Report
- How to Fix Leaky Faucets
- Yes You Can Fix A Leaky Faucet by Yourself. (AWWA)
- Water Conservation at Home (AWWA)
- A Consumer's Guide to Water Conservation (AWWA)
- The Inside/Outside Story (AWWA)
- How Much Water Does Your Lawn Really Need? (Sunset Reprint)
- Drought Survival Guide For Home and Garden (Sunset Reprint)
- 55 Facts, Figures & Follies of Water Conservation (AWWA)

In addition, the City reflects previous year's water usage to current year's water usage on the bi-monthly billing of each customer. This combined with a seasonal conservation message on the back of each bill is a very cost effective method to promote water conservation.

Through subtle advertising and handouts, the City continues to remind the public that water is a limited resource.

Demonstration Program

On an annual basis the City demonstrates water conservation methods at local county fairs and public events. This promotes public awareness and is an active program at the City.

The City constructed Peppertree Corner, a demonstration garden. This garden displays conservation landscaping or "Hydrozoning". Hydrozoning groups plants of similar water, sun and soil needs into the same area and matches an irrigation system to those area. The plants at Peppertree Corner range from succulents to citrus trees with a variety of groundcovers, shrubs and perennials. The garden demonstrates the use of various plants for hedges and screens, slope stabilization, size, color, texture and water needs. A brochure has been prepared to identify the different plants used in the garden.

Tours

The ongoing conservation demonstration and tour of our water and wastewater treatment plants is a very popular program with various organizations. General water conservation is promoted during these tours, which promotes public awareness. This is an ongoing program.

5.8 - BMP 8 - School Education Programs

Educational Information Materials

The City developed an in-school water conservation education program in 1987. Currently, the City offers free water conservation programs for 2nd & 5th grade level. Students receive information about the water cycle, water sources, and important water conservation issues. Each fiscal year approximately 1,000 students attend these programs. The City's Coordinator of Educational Outreach Programs administers the program through the City's Community Services Department. In addition the City lends conservation films to schools, public service groups, and other organizations on request. This is an ongoing program.

Educational materials currently supplied to schools are:

- I'm A Winner (AWWA sticker)
- Water Conservation Bookmark - City
- Saving Water Inside and Out (Channing L. Bete)
- Save Water and Enjoy It! (Channing L. Bete)
- Protecting Our Water Supplies (Channing L. Bete)
- My Book About Water (Channing L. Bete)
- Conservation Stickers (Channing L. Bete)
- Use Water Wisely (Charming L. Bete)
- The Water Cycle (Channing L. Bete)
- 5 Minute Shower Timer with Conservation Tips

Currently, the City is in its seventh year of conducting a water conservation poster contest. Students from kindergarten through eighth grade, who attend public or private schools within the City, are invited to participate. The winning posters are turned into a 12-month calendar. Through the creativity of children's art we can raise public awareness about water conservation. This is an ongoing program.

5.9 - BMP 9 - Commercial/Industrial Programs

The City has compiled and developed many pamphlets for dissemination to customers and the general public. Information is directed mainly to residential customers with the assumption that conservation will be carried into the work place. See BMP 7 for a list of informational materials currently disseminated to customers.

5.10 - BMP 10 - Wholesale Agency Programs

In August 1992, the City adopted a resolution establishing the Water Demand Reduction Offset Program (Resolution 92-73) for new commercial and industrial development. The program is designed to promote both economic vitality and water use efficiency. New non-residential construction, additions, or alternations would be allowed only if the developer offsets their increased water demand at a 3:1 ratio through toilet retrofitting. The development moratorium remained in place for residential development. In May 1993, the program was extended to all residential construction requiring that increased water demand be offset at a 2:1 ratio through toilet retrofitting (Ordinance 93-08). This program was suspended in July 1998. It should be noted that State Plumbing Code requires the installation of low water use fixtures in all new construction. City Plumbing Code requires remodel construction to retrofit the entire building with low flow fixtures.

5.11 - BMP 11 - Conservation Pricing

Increasing Block Rates

The City has increasing block rates for all residential water customers and uniform rates for other water customers. All sewer customers are on a commodity rate, which also promotes water conservation. Increasing block rates are designed, whereby the cost per unit of water increases with usage, to promote water conservation. The rates have been structured to include future capital expenses. Both sewer and water rates were adopted by Ordinances 2005-005 and are in effect for FY 2005-2006. (See Figure 5-1 at the end of this section).

5.12 - BMP 12 - Water Conservation Coordinator

The City has a conservation coordinator in the Utilities Business Division of the Public Works Department, with approximately 30 percent of budgeted time devoted to water conservation. The actual time varies, depending upon other City needs.

5.13 - BMP 13 - Water Waste Prohibition

In April, 1989, the City adopted Ordinance 89-6 (see Appendix D), prohibiting water waste. Among other uses prohibited are gutter flooding, non-recirculating fountains, customer plumbing leaks, hosing of hard surfaces and automatic water serving in restaurants. The ordinance defined prohibited activities and the penalties to be imposed for violations.

5.14 - BMP 14 - Ultra-Low Flush Toilet Replacement

In October 1991 the City adopted a resolution establishing a Toilet Rebate Program. Through this City incentive program, a City water customer received $80.00 for replacing each 5-gallon per flush or larger toilet with an ultra low volume toilet. The program was discontinued in the fall of 1995 when funding ended. An estimated 7,550 toilets were retrofitted with an annual savings of approximately 380 AFY. In addition, the City has an ordinance requiring all homeowners remodeling, extending or adding kitchens, bathrooms or laundry facilities, which involves an increase in the number of plumbing fixtures, to retrofit with water-efficient plumbing fixtures throughout the residence.

5.15 - City Conservation Resolutions/Ordinances

The following resolutions and ordinances have been adopted by the City relating to water supply and conservation.

- In 1983, the City adopted the County Conservation Management Plan (Resolution 83-1 68) (see Appendix E) and began examination of existing water sources, primarily groundwater basins shared with other agencies.

- The City prepared and adopted an UWMP required by state law in December, 1986 (Resolution 86-170) (see Appendix E). In the 1986 UWMP, the City included a proposed emergency preparedness plan to coordinate action in the event of resource shortage due to natural disasters.

- The City prepared and adopted rate changes for all water customers and modified its increasing block rates in 1988 (Ord. 88-22) to promote water conservation and then modified the rates again in 1989 (Ord. 89-10), based upon recommendations from a rate study completed by engineering consultants. Further rate increases have been implemented with the latest one in July 2005 (Ord. 2005-005 - Appendix D)

- In April 1989, the City adopted Ordinance 89-6 (Appendix D) prohibiting water waste. The ordinance defined prohibited activities and the penalties to be imposed for violations.

- The City adopted Ordinance 89-25, which revised its building code effective January 1990 to require installation of ultra low flush (ULF) toilets for all new construction. This implementation schedule was two years ahead of state law requirements for January 1992 (AB 2355) and was the first such ordinance in Ventura County.

- In February 1990, the City adopted Resolution 90-16, declaring a water shortage emergency. Following public hearings to determine what regulations should be implemented to respond to drought-induced water supply shortages, the City adopted ordinances 90-03, 90-08, and 90-16 in March 1991. These ordinances establish mandatory water conservation regulations to reduce water demands throughout the city.

- In 1990, the City Council committed the City to a course of action on water planning and implementation by adopting Resolution 90-79. This action outlines the City's goals to offset water shortfalls and to plan and implement a Comprehensive Water Resource Management Plan to manage water supplies for the short and long term.

- In October 1991, the City Council adopted Resolution 91-94 amending the Urban Water Management Plan (UWMP) for 1990 in compliance with the UWMP Act (AB 2661).

- In October 1991, the City adopted a resolution establishing a Toilet Rebate Program.

- In April 1992, the Mandatory Water Conservation Ordinance was modified to reduce the conservation goal to 15 percent. This change was based upon improved production from the Ventura River.

- In August 1992, the City adopted a resolution establishing the Water Demand Reduction Offset Program (Resolution 92-73, Appendix 17) for new commercial and industrial development. The program is designed to promote both economic vitality and water use efficiency. New non-residential construction, additions, or alternations would be allowed only if the developer offsets their increased water demand at a 3:1 ratio through toilet retrofitting. The development moratorium remained in place for residential development. In May 1993, the program was extended to all residential construction requiring that increased water demand be offset at a 2:1 ratio through toilet retrofitting, Ordinance 93-08. This program was suspended in July 1998.

- The citizens of Ventura voted on November 3, 1992, in favor of desalinating seawater over importing water through the SWP as the preferred supplemental water source.

- On March 1, 1993, the City Council approved Ordinance 93-01 which eliminated the penalty provisions of the Mandatory Water Conservation Regulations. This decision was based on two factors: 1) improved water availability due to high Ventura River flows and 2) the expectation that Venturan's will continue their commitment to water conservation.

- Approved by City Council on June 28, 1993, Ordinance 93-23 officially terminated the City's three-year old water shortage emergency.

- In December 1994, the City adopted the Comprehensive Water Resources Management Plan (CWRMP) as a policy document to provide for rational management of the City's water resources to ensure a reliable water supply during future droughts (see Appendix B). The plan addresses water policy concerns, water quality, sets the means to evaluate the need for a supplemental water supply, and establishes a water policy role for the City Council. The CWRMP requires a biennial water supply report that updates City Council on the status of water supply availability.

- In May 1996 the City adopted Resolution No. 96-51, the 1996 Urban Water Management Plan; and the 2000 Urban Water Management Plan on February 12, 2001 (Ord. 2001-20) (see Appendix E).

- On April 20, 2004 City Council approved Ordinance 2004-008, which requires all multi-unit buildings constructed after July 1, 2004 to be equipped with sub-meters.

5.16 - Regional Participation

The City is regionally active in conservation and are participants in the following local organizations and plans:

- Ventura County Association of Water Agencies (AWA).
- Fox Canyon Ground Water Management Agency.
- Santa Paula Basin Technical Advisory Committee.
- Channel Counties Water Utility Association.
- Countywide Integrated Water Resource Management Plan (RMA).

During 2005, the major water purveyors in Ventura County undertook Integrated Water Resource Management Planning (IWRMP). The purpose of the regional plan was to describe water systems and their common elements to assist in developing capital projects that would tend to integrate water system infrastructure and improve reliability and redundancy in the County. Completion of the plan is expected at the end of 2006 and may help some of the projects qualify for Proposition 50 funding.

As a signatory to the CUWCC, the City continues to set a good example of implementing a proactive water conservation program in Ventura County.

Figure 5-1

City of San Buenaventura FY 2005-2006 Water and Wastewater Rates

FY 2005-2006 Water Rates

Water Volume Rates
Per Hundred Cubic Feet (HCF)
Single Family Residential

Water Usage HCF	City $	County $
1-16	1.60	2.71
17-42	2.11	3.59
43+	3.39	5.76

Multiple Family Residential

Water Usage HCF	City $	County $
1-10	1.60	2.71
11-24	2.11	3.59
25+	3.39	5.76

Non-Residential

Water Usage HCF	City $	County $
Per HCF	2.11	3.59

Raw Water*, Irrigation*, & Municipal Parks

Water Usage HCF	City $	County $
Per HCF	1.11	1.11

Reclaimed Water

Water Usage HCF	City $	County $
Per HCF	0.48	0.48

1 HCF = 748 gallons
*Non Potable, Non Fully Treated Water

Bimonthly Service Charge
(Based on Meter Size)
Residential & Non-Residential

Meter Size	City $	County $
5/8 & 3/4	9.82	16.75
1	19.33	32.89
1.5	32.66	55.57
2	45.96	78.10
3	104.59	177.41
4	171.24	290.75
6	337.57	574.11
8	503.89	856.23
10	670.21	1,139.59
12	770.00	1,309.61

Fire Line Bimonthly Charge

Meter Size	City $	County $
1	4.07	6.89
2	4.07	6.89
3	12.22	20.71
4	24.52	41.64
6	67.99	115.55
8	142.91	242.70
10	245.18	416.42
Each Add'l inch	4.07	6.89
Dom/Res."U" 1"	1.24	2.10

City Reclaim Meter Charge

Meter Size	Bi-Mo $	Monthly $
5/8 & 3/4	9.82	4.91
1	19.33	9.67
1.5	32.66	16.33
2	45.96	22.98
3	104.59	52.30
4	171.24	85.62
6	337.57	168.78
8	503.89	251.94
10	670.21	335.11
12	770.00	385.00

FY 2005-2006 Wastewater Service Rates

Customer Classification

	# HCF **	Bimonthly Rate $
Single Family & Multiple Dwelling	0 - 8	26.49
	9 - 10	32.50
	11 - 12	38.50
	13 - 14	44.50
	15 - 16	50.49
	17+	56.50

**Usage established during determination period November 1 thru April 30. Charge based on lowest water usage during determination billings.

Schools* **	101.69
Churches* **	56.50

*** Per Single Family Dwelling Unit Equivalent. Rates will vary;See Ordinance chapter 22.220, section 020 for rate factors.

Industrial (Billed Monthly)

Flow	per million gallons	1,559.41
COD	per 1000 pounds	235.05
SS	Per 1000 pounds	530.00

Customer Classification

Commercial	# HCF	Bimonthly Rate $
Group 1:	0 - 8	$17.01
	9 + per unit	$2.13
A. Laundromats		
B. Car Wash		
C. Professional Offices		
D. Convalescent homes		
E. Wholesale Establishments		
F. Offices		
G. Retail Establishments		
H. Public Buildings		
I. Barber & Beauty Shops		
J. Gas Stations & Garages		
K. Bars w/out dining facilities		
L. Theaters		
M. Gyms		
N. Hospitals		
O. Grocery stores w/out garbage grinders		
Group 2	0 - 8	$19.35
	9 + per unit	$2.42
A. Hotels & Motels w/out dining facilities		
B. Commercial laundries		
Group 3	0 - 8	$32.49
	9 + per unit	$4.06
A. Hotels w/dining facilities		
Group 4	0 - 8	$38.76
	9 + per unit	$4.85
A. Mortuaries		
B. Grocery stores with garbage grinders		
Group 5	0 - 8	$38.68
	9 + per unit	$4.84
A. Bakeries		
B. Restaurants		
C. Multi-use shopping centers		
Group 6		$56.50
A. Plant Nurseries		

Section 6 - Water Shortage Contingency Plan

6.1 - Introduction

In October 1991, the Governor signed legislation that required each California urban water supplier providing municipal water directly or indirectly to more than 3,000 customers or supplying more than 3,000 AF of water annually to develop a Water Shortage Contingency Plan. Although the specific requirements of the law were based on water shortages from the current drought, the plan is intended to better prepare agencies and the State to deal with shortages resulting from earthquakes, fires, system failures, contamination, and future droughts. Although the City's Comprehensive Water Resources Management Plan does not plan for additional conservation beyond the 12 percent long-term conservation goal, the City prepared this Water Shortage Contingency Plan section to be in compliance with the Urban Water Management Plan requirements.

6.2 - Water Supply Reliability

The existing water sources available on a long-term basis are summarized in Section 3. Casitas and the GMA have both adopted allocation systems that define upper limits on the City's usage, and these limits are lower than the water the City has taken in the past. The City continues to improve groundwater sources on the east side of the City.

As summarized in Table 4-6, additional water supplies will not be needed until sometime after 2025 under average non-drought weather conditions. However, the City will continue to develop additional water sources as well as improve the quantity of existing supplies as identified in Section 4-8. New water supply projects identified in the current 2005 - 2010 Capital Improvement Projects include Saticoy Well #3 and the Saticoy County Yard Well. Numerous waterline replacement projects are planned, which will improve fireflow, and reliability through the elimination of main breaks and water outages during peak demand periods. In addition, planned improvements to the various water facilities, booster pump stations and tanks shall continue to provide a safe and reliable drinking water supply. The Biennial Water Supply Report, which is prepared every two years, helps to ensure that the City is aware of current supply and demand conditions.

While some primary capital improvement projects are focused on improving the City's available water supply, these programs will also partially improve water quality in the process. Additional capital projects that have the sole purpose of improving the quality of delivered water are not being pursued at this time. These could include seawater desalination, groundwater softening or importing state water. These projects will be considered in conjunction with the development of a long-term supplemental water supply source. Water quality improvement is made possible by shifting water supply from eastside groundwater to new sources with lower TDS. As stated previously, the

westside surface water sources have better quality water when compared to the other existing eastside groundwater sources.

6.3 - Three-Year Worst Case Scenario

The primary factor in limiting the City's existing water supplies is drought. In evaluating a three-year worst-case water supply scenario, the City assumed that sever drought conditions (no rain and above average temperatures) would begin immediately and continue for three consecutive years. Planned water sources for fiscal year 2005, reflecting capacity of current facilities will be used as an average/normal water year base for estimating purposes. Also, it was assumed that demand would not be reduced in response to the drought conditions. Available water supplies during the three year period were projected considering: 1) the current status of each existing source and 2) the past response of each existing source to similar drought conditions. In addition, Table 6-1 reflects a single dry water year and Table 6-2 provides a summary of single dry water years in five-year increments over twenty years, compared to projected water demand.

Also, Table 6-1 illustrates a potential three-year worst-case scenario. Table 6-4 reflects the required multiple-dry water years during the twenty-year projection period in five-year increments. It must be remembered that the scenarios include assumptions for purposes of illustration and during drought conditions agencies often find ways to mitigate the shortages. Also, because of the complexities of the City's water sources, the specific numbers are only approximations.

Table 6-1

Supply Reliability and Demand Comparison (Acre Feet)

	[1] Average/Normal Water Year	[2] Single Dry Water Year	Multiple Dry Water Years		
			Year 1	Year 2	Year 3
Ventura River[3]	6,700	2,859	2,859	1,430	700
Casitas[4]	8,000	7,090	7,090	7,090	4,960
Oxnard Plain GW[5]	4,600	4,400	4,400	4,400	4,400
Mound Basin GW[6]	5,700	4,365	4,365	2,838	2,270
Santa Paula GW[7]	2,600	3,000	3,000	3,000	3,000
Saticoy County Yard Well[8]	0	1,800	1,800	900	675
Total Source Capacity	27,600	23,514	23,514	19,658	16,005
Less Raw Water Demand[9]	1,000	1,000	1,000	1,000	1,000
Available Treated Water	26,600	22,514	22,514	18,658	15,005
Total Treated Water Demand[10]	19,766	19,766	19,766	19,937	20,109
Demand Delta	6,834	2,748	2,748	-1,279	-5,104
Banked Groundwater Used[11]	0	0	0	1,300	5,120
Surplus Available for Banking[12]	6,834	2,748	2,748	21	16

Notes:

[1] From Table 3-6 Year 2005 data with adjustment to Ventura River to reflect capacity of current facilities with a full basin.

[2] Rainfall in 1990 was 5.53 inches, well below the yearly average of 15 inches. For a single dry water year, 1990 historical data is used for the Ventura River and Mound Basin (ref. Table 3-6). Casitas reflects Stage 2 allocation, Oxnard source reflects the future available supply per GMA Ordinance. Santa Paula Basin reflects allocated amount per UWCD agreement and Saticoy Yd Well reflects 75% of average year (see Table 3-8).

[3] Ventura River available supply in Year 1 reflects the single dry water year. Year 2 is 50% of Year 1. Year 3 is the worst-case available annual yield per the Comprehensive Water Resources Management Plan.

[4] Casitas available supply during Year 1 and 2 reflects stage 2 allocation with year 3 reflecting stage 5 allocation.

[5] Oxnard Plain available supply assumed to be the City's allocation at 80% per GMA Extraction Reductions (Table 3-2).

Notes (continued)

[6] Mound Basin available supply for year 1 is assumed to be the single dry water year, decreasing in Year 2 by 35% based on 1990/1991 historical data. Year 3 reflects a 20% decrease of year 2.

[7] Santa Paula Basin available supply assumed to be City's allocated amount per agreement with UWCD.

[8] Saticoy County Yard Well year 1 is assumed to be 75% of average year. Year 2 at 50% of year 1 and year 3 at 75% of year 2 (See Table 3-8).

[9] From Table 4-4

[10] From Table 4-4. Average and Single Dry Year reflects per capita use of .18 to projected 2005 population. The three multiple dry years also reflect 0.18 per capita water uses to extrapolated population estimates. (Population year 1 = 109,812; year 2 = 110,759; year 3 = 111,714).

[11] Reduced water demands have allowed the City to store 35,447 AF in the GMA bank at the end of calendar year 2004. The use of banked groundwater would reduce our reserve but allow the City to meet its treated water demand.

[12] Surplus for banking is the lesser of net supply or GMA allocation amount.

Table 6-2

Summary of Projected Single Dry Water Year Demand and Supply
(Five Year Increments in Acre Feet)

Year	Projected Planning Area Population[1]	Projected Water Demand[2]	Projected Single Dry Water Year Supply[3]	Difference (Supply-less-Demand)	Difference As	
					% of Supply	% of Demand
2010	114,629	21,633	25,464	3,831	15.0%	17.7%
2015	119,659	22,539	25,464	2,925	11.5%	13.0%
2020	124,913	23,484	25,464	1,980	7.8%	8.4%
2025	130,400	24,472	25,464	992	3.9%	4.1%

Notes:

[1] Projected planning area population is from Table 4-3
[2] Projected water demand is from Table 4-4
[3] Projected water supply is from Table 6-1 for a Single Dry Water Year (23,514 a/f) reduced by 300 a/f, per GMA Extraction Requirement. Plus the New Saticoy Well #3 (Ref. Table 3-8, 2,250 a/f)

It should be noted that without the banked water in the Fox Canyon Aquifer, there would be shortages in year two and three of the multiple dry water years reflected in Table 6-1. Year two reflects a shortfall of 1,279 and year three 5,104 or 6% and 25%, respectively of total demand. However, taking into account the new Saticoy Well #3 (Table 3-8), these shortfalls can potentially be reduced as reflected on Table 6-3. Because of the banked water in the Fox Canyon Aquifer and the future water supply projects, under this drought condition there would be no need for rationing. However, if rationing became required, possible courses of action would be to:

1) Accelerate the completion of the Water Supply CIP Projects.
2) Increase pumping from the Santa Paula Basin.
3) Through voluntary, and then mandatory water conservation, reduce demand.

What if a drought occurred after the year 2010? Since the City does not use banked water except for emergencies, presumably there would be banked credits in the Fox Canyon Aquifer, and presumably the Mound and Santa Paula Groundwater Basins would have increased yields, also mitigating the problem.

Table 6-3

Demand Comparison with Additional Water Supply

	Multiple Dry Water Years		
	Year 1	Year 2	Year 3
Available Treated Water[1]	22,514	18,658	15,005
Saticoy Well #3[2]	2,250	1,125	844
New Total Available Water	24,764	19,783	15,849
Less Water Demand[1]	19,766	19,937	20,109
New Demand Delta	4,998	-154	-4,260
Demand Shortfall %		-0.8%	-21.2%

Notes:

[1] From Table 6-1
[2] From Table 3-8

Table 6-4

Summary of Projected Multiple-Dry Three Year Water Demand and Supply
(Five Year Increments in Acre Feet)

Year	Projected Planning Area Population[1]	Projected Water Demand[2]	Projected Supply Multiple-Dry Water Years[3]	Difference (Supply-less-Demand)	Banked Groundwater December 2004	
					Standalone[4] 35,447	CUM[5] 35,447
2008	112,677	21,282	25,764	4,482	39,929	39,929
2009	113,648	21,457	20,783	-674	39,256	39,256
2010	114,629	21,633	16,549	-5,084	34,171	34,171
2013	117,621	22,172	25,464	3,292	38,739	37,464
2014	118,635	22,354	20,483	-1,871	36,868	35,592
2015	119,659	22,539	16,549	-5,990	30,878	29,603
2018	122,784	23,101	25,464	2,363	37,810	31,965
2019	123,844	23,292	20,483	-2,809	35,001	29,157
2020	124,913	23,484	16,549	-6,935	28,066	22,221
2023	128,177	24,072	25,464	1,392	36,839	23,613
2024	129,284	24,271	20,483	-3,788	33,051	19,825
2025	130,400	24,472	16,549	-7,923	25,128	11,902

Notes:

[1] Projected planning area population is from Table 4-3 with population estimates extrapolated to fit three multi dry years.

[2] Projected water demand is estimated population multiplied by 0.18 AF/capita based on 1994 - 2004 average post mandatory water conservation per capita use from Table 4-1 plus 1,000 AF/yr raw water demand.

[3] Projected water supply reflects Total Source Capacity from Table 6-1 Multiple Dry Water Years plus the New Saticoy Well #3 (Ref. Table 6-3). Additionally, 2010 forward reflects Fox Canyon GMA Extraction Requirements (Ref. Table 3-2)

[4] Each consecutive three year period reflects a standalone snapshot over the next twenty years ending in five year increments. Assumes only one of the three-year drought periods occur. For example if a drought occurred in 2013 through 2015 it is assumed that banked GMA credits would be available to support the water demand delta. As of December 2004, the City's banked groundwater was 35,447 a/f.

Notes (continued)

[5] Reflects a cumulative reduction of banked groundwater for each five year period over the next twenty years. This assumes four (4), three-year drought periods occur in the next twenty years. In this example the use of banked GMA credits would reduce our reserve but allow the City to meet its treated water demand over the next twenty years.

6.4 - Rationing Stages and Reduction Goals

The City has developed a five-stage water shortage plan that would include voluntary and mandatory stages. The stages are intended to be fair to all water customers with the minimum impact on business, employment and quality of life. The water shortage stages and the reduction goals for each stage are outlined in Table 6-5.

Table 6-5
Water Shortage Stages And Reduction Goals

Shortage	Stage	Demand Reduction Goal	Program Type
Up to 10%	Stage 1	10% reduction	Voluntary
10-15%	Stage 2	15% reduction	Mandatory
15-20%	Stage 3	20% reduction	Mandatory
20-30%	Stage 4	30% reduction	Mandatory
30-50%+	Stage 5	50%+ reduction	Mandatory

At each of the five stages of action the City, the Utilities Division and City water customers each have certain actions they must undertake. Public agency actions involve increasing public awareness and education, adopting ordinances prohibiting water waste and establishing mandatory water conservation regulations, and periodically reviewing triggering levels. Water customer actions involve implementing water conservation measures and complying with water conservation ordinances.

In addition to its continuing water conservation efforts, the City implemented a Toilet Rebate Program and the Water Demand Reduction Offset Program (Water DROP) during the mandatory conservation period (1990-1993). Through the City's Toilet Rebate Program, a water customer received $80 for replacing each 5 gallon per flush or larger toilet with an ultra low volume toilet. The Water DROP program is designed to promote both economic vitality and water use efficiency. New non-residential construction, additions, or alterations are now allowed if the developer offsets their increased water demand at a 3:1 ratio through retrofitting. A 2:1 ratio is required for residential projects. With the lifting of mandatory water conservation these programs have been discontinued. However, future drought conditions could reactivate these programs once more.

Significant measures of the five-stage water shortage plan include:

Stage 1: 0-10 Percent Reduction Goal (Voluntary)

Public Agency Actions

- Monitor conservation levels and increase public awareness.
- Notify customers of shortage conditions and disseminate literature.
- Publish customer use goals.
- Identify Water Shortage Contingency Plan stages and the possible actions per stage.
- Distribute water conservation brochures, information, and conservation kits.
- Conduct exterior and interior water audits upon customer requests.
- Request voluntary water consumption reduction.
- Maintain tiered rate structure to promote water conservation.
- Establish/enforce water waste ordinance.
- Establish/enforce ordinance prohibiting watering from 9 am to 6 pm.

Water Customer Actions

- Monitor own meter for usage.
- Implement conservation measures to reduce usage.
- Comply with water waste ordinance.
- Comply with prohibited watering during 9 am to 6 pm.

Stage 2: 10-15 Percent Reduction Goal (Mandatory)

Public Agency Actions (In addition to actions established in previous Stage):

- Initiate Mandatory Water Conservation Regulations of Ordinance No. 92-07.
- Enforce mandatory water consumption goals and allocations for all customers.
- Enact water rate surcharge for water consumption over customer allocation. Water in excess of allocation is billed at four times the City's highest water rate. For the third consecutive excessive bill, surcharge rate is ten times the City's highest water rate. Beyond a third billing period, restrictors placed on meters, at the customer's expense.
- Enactment of allocation adjustment and penalty review programs. Customers can apply for an allocation adjustment for the reasons specified in ordinance.
- Customers may appeal in writing for a waiver of penalties incurred due to a leak or break, incorrect allocation or hardship.

Water Customer Actions (In addition to actions established in previous Stage):

- Comply with mandatory water conservation regulations.

- All water customers requesting an increase in their water allocation must undergo a water audit and install water efficient plumbing fixtures for all fixtures at their business or residence.

Stage 3: 15-20 Percent Reduction Goal (Mandatory)

Public Agency Actions (In addition to actions established in previous Stage)

- Initiate Mandatory Water Conservation Regulations as an Ordinance.
- Establish and enforce mandatory water consumption goals and allocations for all customers.

Water Customer Actions (In addition to actions established in previous Stage)

- Comply with mandatory water conservation guidelines.

Stage 4: 20-30 Percent Reduction Goal (Mandatory)

Public Agency Actions (In addition to actions established in previous Stage)

- Initiate Mandatory Water Conservation Regulations as an Ordinance.
- Establish and enforce mandatory water consumption goals and allocations for all customers.

Water Customer Actions (In addition to actions established in previous Stage)

- Comply with mandatory water conservation guidelines.

Stage 5: 30-50+ Percent Reduction Goal (Mandatory)

Public Agency Actions (In addition to actions established in previous Stage)

- Initiate Mandatory Water Conservation Regulations as an Ordinance.
- Establish and enforce mandatory water consumption goals and allocations for all customers.
- All water use not required for health and safety is prohibited.

Water Customer Actions (In addition to actions established in previous Stage)

- Comply with mandatory water conservation regulations
- Prohibition of all outside water use unless necessary for the preservation of health and safety and the public welfare.
- Watering with hand-held five gallon maximum bucket, filled at exterior hose bib or interior faucet (not by hose) shall be allowed at any time. This will assist in preserving vegetable gardens or fruit trees. Outdoor use of bath water,

dishwater, and laundry water for irrigation purposes is encouraged to the extent this practice is allowed under local health and safety regulations.

- The filling, refilling or adding of water to swimming and/or wading pools is prohibited.
- The operation of any ornamental fountain or similar structure is prohibited.

6.5 - Priority by Use

The following priorities for use of available water, based on California Water Code Chapter 3 and community input were used in establishing consumption limits. In order of preference they are:

1. Health and Safety - interior residential and fire fighting.
2. Commercial, Industrial and Governmental Uses - maintain jobs and economic base.
3. Permanent Crops - takes five to ten years to replace.
4. Annual Crops - protect jobs.
5. Existing Landscaping - especially trees and shrubs.
6. New Demand - projects without permits when shortage declared.

6.6 - Health and Safety Requirements

Based on commonly accepted estimates of interior residential water use in the United States, Table 6-6 indicates per capita health and safety water requirements.

Table 6-6

Typical Health and Safety
Water Pre Capita Quantity Calculations

	Non-Conserving Fixtures	Habit Changes[1]	Conserving Fixtures[2]
Toilets	5 flushes x 5.5 gpf 27.5	3 flushes x 5.5 gpf 16.5	5 flushes x 1.5 gpf 7.5
Shower	5 min x 4.0 gpm 20.0	4 min x 4.0 gpm 16.0	5 min x 2.0 gpm 10.0
Washer	12.5 gpcd 12.5	11.5 gpcd 11.5	11.5 gpcd 11.5
Kitchen	4 gpcd 4.0	4 gpcd 4.0	4 gpcd 4.0
Other	4 gpcd 4.0	4 gpcd 4.0	4 gpcd 4.0
Total (gpcd)	68.0	52.0	37.0
HCF per capita per year	33	25	18

[1] Reduced shower use results from shorter showers or reduced flow. Reduced washer use results from fuller loads.

[2] Fixtures include ULF 1.6 gpf toilets, 2.0 gpm showerheads and efficient clothes washers.

6.7 - Water Shortage Stages and Triggering Mechanisms

The "Water Shortage Contingency Plan" is designed to reduce demands up to a minimum of 50 percent of normal supply during a severe or extended water shortage. Water shortage triggering levels are established to ensure that the policy statements are implemented. Two types of triggers are discussed: 1). Triggers that would elicit a short term water supply response (i.e., voluntary or mandatory water conservation program, emergency water connections, etc.) and 2). Triggers that would trigger a long-term water supply response (i.e., seawater desalination facility, imported water, etc.).

The specific criteria for triggering the City's water shortage stages are listed in Table 6-7.

Table 6-7
Water Supply Triggering Levels - Short Term

Stage	Percent Shortage	Total Water Supply Shortage	Peak Day Shortage (Current Year)
Stage 1	Up to 10% supply reduction current year, 15% second year, 30% third year, or 50% fourth year	Combined supply reductions totaling up to 2,400 AFY	Up to 4 MGD
Stage 2	10 to 15% supply reduction current year, 30% second year, or 50% third year	Combined supply reduction totaling between 2,401 to 3,600 AFY	4.1-6 MGD
Stage 3	15 to 20% supply reduction current year	Combined supply reduction totaling between 3,601 to 4,800 AFY	6.1-8 MGD
Stage 4	20 to 30% supply reduction current year, or 50% second year	Combined supply reductions totaling between 4,801 to 7,200 AFY	8.1-12 MGD
Stage 5	30 to 50% + supply reduction current year	Combined supply reductions totaling 7,201 AFY or more	More than 12 MGD

If the predicted shortage is in total water supply sources for the current year or subsequent years, the appropriate stage allocation program should be in effect year round. For shortages limited to peak demand days, the City council has the option of limiting the allocation program to the six months from May to October.

In the event of an emergency, the City Manager has the ability to make and issue rules and regulations on matters reasonably related to the protection of life and property as affected by the emergency (Section 5313.2 of City Ordinance Code). The City has developed the Principles and Guidelines for Emergency Water Ordinance to provide guidance during an emergency that severely impacts the City's water supply (see Appendix D). The emergency water ordinance outlines the manner in which water services during emergency conditions will be distributed to all the City customers in a fair and equitable manner.

With respect to long-term "triggering levels," technical studies and evaluations completed in 1994 by Boyle Engineering Corporation, have provided valuable information concerning the City's immediate and long-term supplemental water supply needs. The evaluation of projected water supplies and demands concluded that the City will not need a long-term base-loaded supplemental water supply for at least fifteen (15) more years. It should be noted that the City is currently updating the Water Master Plan and an update to this evaluation is expected in 2006.

The City currently has a monitoring program to provide roughly five year's advance warning of the need for a supplemental water supply, whether the need be for drought-proofing or for long term base-loaded supply. This will give the City sufficient time to fully implement a supplemental water supply project, from the feasibility study phase to completion of construction and start up of the facility. This program includes a biennial report, provided to the City council, of our water supply conditions. The water supply conditions which will be reviewed include the production from the Ventura River, the storage level in Lake Casitas, the City's balance in the Fox Canyon GMA groundwater bank, the status of the City's other groundwater basins, and water demand within the City.

In addition to the short term water supply triggers described above, the City's long term water supply will be evaluated using the following triggers:

1. Ventura River - the previous year's water production from the Ventura River was less than 2,500 AF.
2. Lake Casitas - the storage in the lake reaches the 95,000 AF Stage 2 level.
3. Fox Canyon GMA Bank - the City's balance in the fox Canyon GMA groundwater bank falls below 10,000 AF.
4. Other Groundwater Basins - conditions in the Mound and Santa Paula groundwater basins begin to deteriorate significantly.
5. Water Demand - the water demand within the City reaches 27,500 AFY.

The triggers for a drought-proofing supplemental water supply, based on the condition of the Ventura River, Lake Casitas, the Fox Canyon GMA bank, and the groundwater basins, should be considered together. It is suggested that if any two of the first four triggers identified above are reached, then the decision making process for implementation of a supplemental water supply project should begin.

The water demand trigger for a long-term base-loaded supplemental water supply, the fifth trigger, should be considered independently of the drought-proofing triggers. Reaching the water demand trigger would also begin the decision making process for implementation of a supplemental water supply project regardless of the condition of the City's existing water supplies. The City Council's decision-making process to select either seawater desalination, importing SWP water or another alternative will focus on the actual circumstances at that future time. Currently, our projected water demand for 2025 is 24,472 A/F.

6.8 - Water Allotment Methods

The City has established the following customer classifications and the allocation method for each classification:

- Single Family -Hybird of Per-capita Allocation and Percentage Reduction
- Multi-Family -Hybird of Per-capita Allocation and Percentage Reduction
- Commercial -Percentage Reduction
- Industrial -Percentage Reduction
- Firelines -No Reduction
- Temporary -No Reduction
- Municipal -Percentage Reduction
- Schools -Percentage Reduction
- Churches -Percentage Reduction
- Unaccounted -No Reduction
- New Demand -Per-capita Allocation

Each customer will be notified of their classification and allotment by mail before the effective date of the Water Shortage Emergency. New customers and connections will be notified at the time service commences. In a disaster, prior notice of allotment may not be possible; notice will be provided by other means. A customer has the option to appeal the Utilities Business Manager's classification or allotment of their account. Appeals shall be processed as set forth in the established Mandatory Water Conservation Regulations.

6.9 - Potable Water Allocations by Priority and Shortage Stage

The City's established potable water allocations are summarized as follows:

- Single Family Residences -32 HCF/billing period(2 mos) or 392 gpd/du
- Multiple Family Residences -20 HCF/unitlbilling period or 245 gpd/du
- New non-residential landscape - Less than historical less 10%
- Municipal/School - Historical less 15%
- Irrigation - Historical less 25%

Mandatory conservation during the drought was terminated June 28, 1993.

6.10 - Rate Structure Under Rationing

Based on fiscal year 2005-2006 water rates and budgeting, Table 6-8 was prepared. The table illustrates the impact of water sales only.

Table 6-8

Water Shortage Contingency Plan
Impact of Water Sales Reductions Based on Conservation Stages

	Base Conservation		Stage 1 @ 10%		Stage 2 @ 15%		Stage 3 @ 20%		Stage 4 @ 30%		Stage 5 @ 50%	
	Estimated Consumption HCF/YR	Estimated Revenue $'s/YR	Estimated Consumption HCF/Yr	Estimated Revenue $'s/YR	Estimated Consumption HCF/Yr	Estimated Revenue $'s/YR	Estimated Consumption HCF/Yr	Estimated Revenue $'s/YR	Estimated Consumption HCF/Yr	Estimated Revenue $'s/YR	Estimated Consumption HCF/Yr	Estimated Revenue $'s/YR
Customer Class												
Single Family Residential	3,403,945	$6,400,186	3,063,551	$5,760,167	2,893,353	$5,440,158	2,723,156	$5,120,149	2,382,762	$4,480,130	1,701,973	$3,200,093
Multi Family Residential	1,840,719	$3,334,514	1,656,647	$3,001,063	1,564,611	$2,834,337	1,472,575	$2,667,611	1,288,503	$2,334,160	920,359	$1,667,257
Commercial	1,711,903	$3,850,400	1,540,713	$3,465,360	1,455,118	$3,272,840	1,369,523	$3,080,320	1,198,332	$2,695,280	855,952	$1,925,200
Industrial	48,007	$101,500	43,206	$91,350	40,806	$86,275	38,405	$81,200	33,605	$71,050	24,003	$50,750
Municipal, Building	16,114	$34,000	14,502	$30,600	13,697	$28,900	12,891	$27,200	11,280	$23,800	8,057	$17,000
Schools	191,943	$405,000	172,749	$364,500	163,152	$344,250	153,555	$324,000	134,360	$283,500	95,972	$202,500
Church	30,420	$65,300	27,378	$58,770	25,857	$55,505	24,336	$52,240	21,294	$45,710	15,210	$32,650
Subtotal	7,243,051	$14,190,900	6,518,746	$12,771,810	6,156,593	$12,062,265	5,794,440	$11,352,720	5,070,135	$9,933,630	3,621,525	$7,095,450
Constants												
Firelines		$228,500		$228,500		$228,500		$228,500		$228,500		$228,500
Temporary	24,171	$51,000	24,171	$51,000	24,171	$51,000	24,171	$51,000	24,171	$51,000	24,171	$51,000
Irrigation, agriculture	44,144	$49,000	44,144	$49,000	44,144	$49,000	44,144	$49,000	44,144	$49,000	44,144	$49,000
Ground Water, Oil Recovery	362,883	$402,800	362,883	$402,800	362,883	$402,800	362,883	$402,800	362,883	$402,800	362,883	$402,800
Subtotal	431,198	$731,300	431,198	$731,300	431,198	$731,300	431,198	$731,300	431,198	$731,300	431,198	$731,300
Grand Total	7,674,248	$14,922,200	6,949,943	$13,503,110	6,587,791	$12,793,565	6,225,638	$12,084,020	5,501,333	$10,664,930	4,052,723	$7,826,750

Table 6-9
Water Shortage Contingency Plan

Projected Range of Water Sales by Conservation Stages

	Cons Base 0%	Stage 1 10%	Stage 2 15%	Stage 3 20%	Stage 4 30%	Stage 5 50%
#HCF	7,674,248	6,949,943	6,587,791	6,225,638	5,501,333	4,052,723
#AF	17,616	15,954	15,122	14,291	12,628	9,303

Revenue & Expenditure @ Conservation Stages

Operating Revenues	Cons Base 0%	Stage 1 10%	Stage 2 15%	Stage 3 20%	Stage 4 30%	Stage 5 50%
Total Water Sales	$14,922,200	$13,503,110	$12,793,565	$12,084,020	$10,664,930	$7,826,750
Total Meter Service Chg	2,152,000	2,152,000	2,152,000	2,152,000	2,152,000	2,152,000
Subtotal Wtr & Mtr Chg	$17,074,200	$15,655,110	$14,945,565	$14,236,020	$12,816,930	$9,978,750
Total Other Revenue	457,000	457,000	457,000	457,000	457,000	457,000
Total Internal Transfer	658,408	658,408	658,408	658,408	658,408	658,408
Grand Total Revenue	$18,189,608	$16,770,518	$16,060,973	$15,351,428	$13,932,338	$11,094,158
% Reduction of Revenue		7.80%	11.70%	15.60%	23.40%	39.01%
Operating Expenses						
Debt & Depreciation	$4,937,465	$4,937,465	$4,937,465	$4,937,465	$4,937,465	$4,937,465
Utility Billing	500,151	500,151	500,151	500,151	500,151	500,151
Utilities Administration	1,693,262	1,693,262	1,693,262	1,693,262	1,693,262	1,693,262
Water Administration	2,340,811	2,340,811	2,340,811	2,340,811	2,340,811	2,340,811
Water Distribution	1,961,101	1,961,101	1,961,101	1,961,101	1,961,101	1,961,101
Water Production	3,253,802	3,253,802	3,253,802	3,253,802	3,253,802	3,253,802
Water Purification	3,103,016	3,103,016	3,103,016	3,103,016	3,103,016	3,103,016
Water Contingency	400,000	400,000	400,000	400,000	400,000	400,000
Total Expenses	$18,189,608	$18,189,608	$18,189,608	$18,189,608	$18,189,608	$18,189,608
Dollar Deficient	$0	-$1,419,090	-$2,128.635	-$2,838,180	-$4,257,270	-$7,095,450
% Deficient		-7.80%	-11.70%	-15.60%	-23.40%	-39.01%

Table 6-9 further identifies revenue impacts due to reduced water sales. The table indicates that without reduced water sales, the commodity or variable portion of the revenue is about 82 percent of total revenue ($14,900,000 ÷ $18,200,000). The remaining revenue is from meter charges (i.e., fixed bi-monthly charges) and from internal revenue and other sources. Under the 50 percent reduced sales scenario, the commodity revenue is 70 percent of total revenue.

Table 6-10 is a summary of water and meter charge sales. The reduced revenue is in all cases less than the percentage water reduction due to the fixed portion of water revenue, i.e., that portion of revenue not impacted by water sales.

Table 6-10
Water Sales and Meter Charge
Revenue Impacts of Water Conservation

Stage	% Conservation	Revenue $ (millions)	Incremental Reduction $ (millions)	Incremental Reduction %	Cumulative Reduction %
-	0	17.1	-	-	-
1	10	15.7	1.4	8.2	8.2
2	15	14.9	0.8	5.1	13.3
3	20	14.2	0.7	4.7	18.0
4	30	12.8	1.4	9.9	27.9
5	50	10.0	2.8	21.9	49.8

On the expense side, the major categories (without decreases as a result of decreases in sales) are summarized in Table 6-11. This information is based on fiscal year 2005-2006 budgetary numbers.

Table 6-11
Water System Expenses

Category	Amount
Debt & Depreciation	$4,937,465
Utility Billing	500,151
Utilities Administration	1,693,262
Water Administration	2,340,811
Water Distribution	1,961,101
Water Production	3,253,802
Water Purification	3,103,016
Water Contingency	400,000
TOTAL	$18,189,608

From Table 6-11, the following observations are made:

1. The debt and depreciation is the largest single program expenditure (although salaries are the largest expense item). Of the $5.0 million, approximately 29 percent is for deprecation (funded for replacements) and the remainder is to fund the City's aggressive capital improvement program and to pay off existing bond payments (latter is about $3,500,000). This includes $750,000 per year taken from water sales revenue. Should there be a significant shortfall in revenue, this is one category where short-term reductions could be made. Long-term reductions should not be considered if the City is to construct and maintain a quality system.

2. "Water Production" includes about $1,285,000 for electricity and $270,600 for ground water extraction out of about $3,254,000. Those two items should be somewhat proportional to water sales i.e., a 50 percent reduction in sales may reduce the expenditures by perhaps $700,000 to $800,000.

3. "Water Purification" could experience some reduction with reduced sales (i.e., in electricity, chemicals and water purchases, which are about $80,000, $192,000 and $1,800,000 respectively). Of course, if the shift during a drought is to more groundwater, treatment costs could actually increase. This would imply:

    - Higher pumping costs to the City.
    - Reduction in cost of purchased water.
    - Reduction in chemical cost to treat surface water.

Overall, Table 6-12 approximates the impact of the Five-Stage Water Shortage Plan with expense reductions to electricity and water purchases.

Table 6-12

Overall Summary of Five-Stage Water Shortage Plan

Stage	Water Conservation	Revenue Reduction[1]	Expense Reduction[2]	Shortfall
1	10%	8%	1.5%	$1.1 million
2	10%	12%	2.3%	$1.7 million
3	20%	16%	3.1%	$2.3 million
4	30%	23%	4.7%	$3.4 million
5	50%	39%	7.8%	$5.7 million

Notes:

[1] From Table 6-9
[2] Without decreasing capital program - very approximate.

The above table is very simplified since drought changes can result in shifts in water sources with impacts on costs. However, it does, in the broad sense, illustrate the types of and order of magnitude of impacts of reduced sales. Shortfalls in a water enterprise fund can typically be met by:

- Use of reserve funds (the City's reserve funds are significant and planned for needed capital facilities).
- Deferral of capital expenditures.
- Deferral of maintenance items.
- Rate increases.
- Shift water sources to less costly water (if possible).

In the City's case, a reduction in water revenue could, theoretically, be mitigated substantially through deferral or avoidance of capital fund expenditures. This would meet short-term cash flow needs, although it should only be considered on a short-term basis. Rate adjustments could also be employed either solely or in conjunction with capital expenditure reductions.

6.11 - Mandatory Prohibitions on Water Wasting

In April 1989, the City adopted Ordinance 89-6 prohibiting water waste (see Appendix D). The ordinance defined prohibited activities and the penalties to be imposed for violations.

6.12 - Mechanism to Evaluate Effectiveness

Certain aspects of water conservation can be monitored and evaluated easily. An example is metered reclaimed water. Other aspects such as public education, are more difficult to measure in terms of effectiveness; in this case, for example, the benefit is in:

Weather patterns make it more difficult to compare one year's results with another. This can be offset by mufti-year analyses, using averages and trends.

General public perceptions and attitudes change as a result of programs by other water suppliers outside the City. Certainly there are programs by Metropolitan Water District, and, indirectly, by organizations such as Southern California Gas Company and Southern California Edison which reinforce the overall conservation theme.

Known conservation programs which are seriously pursued positively by the City tend to impact customer usage. Historically, during drought periods there are countless examples of public cooperation. The City's reduced demand is an excellent example. There also is the permanent impact of mandated programs such as water conserving plumbing fixtures, which result in conservation even if the public is not aware of them.

When severe shortages occur and some degree of rationing is required, a program's effectiveness can be judged directly by water billings. In these cases, targeted results must be met and even reluctant customers will, on the whole, meet the goals.

Specific methods to evaluate effectiveness of water conservation programs to be employed by the City are:

- Metering of a Reclaimed Water Usage. This will determine how much has been used.

- Monitoring Production Quantities. In normal water supply conditions, production figures are recorded daily by automation. The production supervisor and the production leadworker monitor the accuracy of the monthly production totals. The totals are incorporated into the monthly water supply report to the State Department of Health Services by the treatment supervisor.

During a Stage 1 or 2 water shortage, daily production figures are recorded. To verify that the reduction goal is being met, the weekly production and the target weekly production are forwarded to the Water Superintendent and the Utilities Manager.

Monthly reports are sent to the Public Works Director. If reduction goals are not met, the City Manager will notify the City Council so that corrective action can be taken.

During a Stage 3 or 4 water shortage, the procedure listed above will be followed, with the addition of a daily production report to the Water Superintendent.

During a disaster shortage, production figures will be reported hourly to the Water Superintendent, with the addition of a daily production report to the Utilities Manager. Weekly reports will also be provided to the Public Works Director and City Manager.

- Compiling annual statistics to track usage of customer groups to determine trends within those groups. This is currently being done through the water billing computer system. As stated above, a mufti-year examination will aid in reducing the impact of weather patterns as a variable.

- Evaluation of the impact of low-use plumbing fixtures in new construction or retrofitted units. This can be done by multiplying the average usage with and without such fixtures versus low-use fixtures by the number of units.

- Comparing irrigation meter readings. For City parks and other landscaped areas, meter readings can be compared and analyzed to determine the effectiveness of irrigation programs, or landscape materials.

Section 7 - Water Recycling

7.1 - Wastewater System Description

The City of Ventura provides wastewater collection and treatment for the City, for McGrath State Beach Park, and for the North Coast Communities (Ventura County Service Area 29).

Wastewater collection and treatment facilities are operated by the Wastewater Section, which along with the Water Section comprises the Utilities Division of the Public Works Department. Wastewater facilities include 475 miles of sewer mains, 12 lift stations and the Ventura Water Reclamation Facility, a tertiary treatment plant.

7.2 - Water Reuse Association Membership

The City is an active member of the California Water Reuse Association, which helps implement water recycling in California. The City has developed its own water recycling plan for the surrounding service area.

7.3 - Wastewater Generation, Collection and Treatment

The City first provided a municipal sewer system more than a century ago. In 1888 this system extended from Crimea Street west to the Ventura River and from the Pacific Ocean north to Ramona Street. The City later built and operated a primary treatment facility that included an ocean outfall at the foot of Figueroa Street between 1948 and 1972. At that time the outfall was abandoned and the treatment plant replaced with a pump station, which delivered all wastewater flow from the western portion of Ventura through a 3-mile force main to the Ventura Water Reclamation Facility (VWRF).

The VWRF, at 1400 Spinnaker Drive, was constructed in 1958 as a 4 million gallons per day (mgd) secondary treatment facility utilizing trickling filters. The facility is located on the north bank of and discharges treated effluent to the Santa Clara River Estuary. The facility has provided reclaimed water since the 1960's to the City owned Olivas Park Municipal Golf Course approximately one-quarter mile east of the treatment plant.

In 1972 the facility was expanded with the addition of a 10-mgd Activated Sludge treatment process bringing the nominal combined secondary process capacity to 14 mgd. At that time tertiary filters were also constructed to provide filtered effluent for both reclamation and discharge to the Santa Clara River Estuary.

Subsequent facility construction projects have added solids treatment, improved chloramine contact and expanded reclamation pumping and distribution facilities.

Processes currently employed at the treatment facility include screening, grit removal, primary sedimentation, primary flow equalization, roughing filters, activated sludge secondary biological treatment, tertiary effluent filtration and Chloramination.

NPDES permit CA0053651, issued by the Los Angeles Regional Water Quality Control Board as Order 95-074 regulates discharge of reclaimed water to the Santa Clara Tidal Prism.

Reuse of effluent for irrigation is regulated by Los Angeles Regional Water Quality Control Board Order 87-45. Process solids currently are treated by anaerobic digestion, dewatered and applied to agricultural land at River Island Farm near Wasco, California.

Historical and projected wastewater collected and treated is reflected in Table 7-1.

Table 7-1

Wastewater Collected and Treated - Acre-feet per Year

	2000	2005	2010	2015	2020	2025
Wastewater collected & treated in service area	10,570	9,762	10,537	11,312	12,087	12,862
Quantity that meets recycled water standard	100%	100%	100%	100%	100%	100%

Following disinfection, the effluent enters a system of Wildlife Ponds with a combined capacity of 34 million gallons. At the current average daily outfall flow rate of 9.1 MGD, this provides approximately 4 days of detention.

7.4 - Wastewater Disposal and Recycled Water Uses

The City's wastewater facilities include pump stations and pipelines for water reclamation. The effluent reuse system provides effluent for irrigation of golf courses, parks and similar landscape areas. This reuse is an integral part of the city water conservation program and represents a reduction in demand on the potable water supply each year of approximately 325 million gallons. The table below reflects our current and projected recycled water uses. Recycled uses do not include water lost to the ground during storage. These losses are estimated at 1,428 AFIY.

Table 7-2

Recycled Water Uses Projection

Type of Use	Treatment Level	2005 AF/Y	2010 AF/Y	2015 AF/Y	2020 AF/Y	2025 AF/Y
Landscape	Tertiary	871	1,646	2,421	3,196	3,971
Wetlands	Tertiary	7,463	7,463	7,463	7,463	7,463

The NPDES permit for the Wastewater Reclamation Facility mandates that an average of no less than 5.6 MGD of reclaimed water be provided to the estuary of the Santa Clara River for support and enhancement of the estuarine habitat. The quantities of reclaimed water currently delivered represent approximately 50% of the tertiary effluent available above the mandated estuary discharge volume and losses to the ground from storage ponds.

Reclaimed water for irrigation and for discharge to the estuary of the Santa Clara River is withdrawn from the end of the wildlife pond system. Reclaimed water for irrigation is pumped by two pump stations into 3 distribution lines.

Residence in these ponds provides substantial dissipation of Chloramine residual and a corresponding reduction in the cost of dechloramine chemicals needed to meet the requirement for complete Chloramine neutralization prior to discharge to the estuary of the Santa Clara River. Chloramine dissipation also reduces the risk of landscape damage from high Chloramine concentrations in water supplied for irrigation.

Additionally the reservoir capacity of the wildlife ponds serves as a safeguard against the use of effluent of unacceptable quality for irrigation of parkland, where significant public exposure may occur. The pond detention time allows completion of analysis necessary to assure the safety of the irrigation supply before that water would reach the point of irrigation withdrawal.

7.5 - Encouraging Recycled Water Use

In 1990 the City Council adopted a policy on reclaimed water use mandating that all new commercial development located near existing reclaimed water distribution systems must install a dual water system to allow the use of reclaimed water for landscape irrigation. To date one project, the Los Angeles Times Offices for Ventura County, has connected under this policy.

In addition the City has adopted the California Urban Water Conservation Council's "Memorandum of Understanding Regarding Urban Water Conservation in California." This memorandum of understanding includes a commitment to wastewater reclamation …"wherever technically and economically feasible..."

7.6 - Recycled Water Optimization Plan

In 1992 the City commissioned a Reclaimed Water Master Plan to guide future expansion of reclaimed water service. This Master Plan, prepared by Black and Veatch, recommends pursuit of landscape irrigation opportunities adjacent to or within reasonable distances of existing reclaimed water distribution systems. Reclaimed water uses for agricultural applications are not recommended because of reclaimed water mineral quality limitations. Within the technical and economic limitations defined, the following potential reclaimed water uses were identified in the master plan:

Table 7-3

Projected Demands of Existing and Potential Near-Term Markets

Market	Market ID No.	Existing Source of Supply	Average Annual Demand [mgd, (AFY)]	Maximum Day Demand [mgd]
Existing				
Olivas Park Golf Course	1	Reclaimed	0.543 (608)	1.262
Buenaventura Mun Golf Course	5	Reclaimed	0.247 (277)	0.665
Marina Park	3	Reclaimed	0.015 (17)	0.042
Olivas Adobe Hist. Monument	4	Reclaimed	0.005 (6)	0.102
Harbortown Landscaping	2	Reclaimed	0.002 (2)	0.015
Subtotal			0.81 (907)	2.09
Near Term				
River Ridge Golf Course	7	GMA	0.500 (560)	1.400
United Foods, Inc.	6	Potable	0.187 (209)	0.524
Ventura County Fairgrounds	42	Potable	0.147 (165)	0.421
Bailard Landfill	9	GMA	0.126 (141)	0.353
Ivy Lawn Cemetery	45	Mound	0.120 (134)	0.336
Ventura Coastal	43	Potable	0.080 (90)	0.224
Polo Grounds	46	Mound	0.062 (69)	0.174
Hofer and Swift Development	14	Potable	0.052 (58)	0.146
Coastal Landfill	8	GMA	0.038 (43)	0.106
Ventura Marina MHP Office Landscaping	11	Potable	0.030 (34)	0.084
Caltrans Landscaping (101)	55	Potable	0.028 (31)	0.078
Ocean Avenue Park	44	Potable	0.024 (27)	0.067
Ventura Auto Ctr. Landscaping	13	Potable	0.012 (13)	0.034
San Buenaventura Business Ctr.	47	Mound	0.009 (10)	0.025
Arundell Linear Park	17	Potable	0.009 (10)	0.025
Trammell Crow	48	Mound	0.008 (9)	0.022
Ventura West Marina Landscaping	10	Potable	0.006 (7)	0.017
Pierpont Elementary School	12	Potable	0.005 (6)	0.014
Block and Co., Inc. Landscaping	15	Potable	0.004 (5)	0.011
Telephone Plaza	49	Mound	0.003 (3)	0.008
Top 10 Properties	16	Potable	0.002 (2)	0.006
Subtotal			1.45 (1,626)	4.07
Potable			0.586 (657)	1.64
GMA			0.664 (744)	1.86
Mound			0.202 (225)	0.57
Total			2.26	6.16

Table 7-4

Potential Long-Term Markets at Existing Effluent Quality

Market	Market ID No.	Existing Source of Supply	Average Annual demand [mgd, (AFY)]	Maximum Day Demand [mgd}
Ventura County Govt. Center	27	Mound	0.105 (118)	0.294
Ventura Community College	34	Potable	0.079 (89)	0.221
Turtle Creek HOA	22	Potable	0.072 (81)	0.202
Camino Real Park	19	Potable	0.060 (67)	0.168
Caltrans Landscaping (126)	21	Potable	0.058 (65)	0.162
Buena High School	32	Potable	0.041 (46)	0.115
Arroyo Verde Park	33	Potable	0.040 (45)	0.112
Ventura High School	39	Potable	0.030 (34)	0.084
Balboa Middle School	30	Potable	0.017 (19)	0.048
Cabrillo Middle School	50	Potable	0.016 (18)	0.045
Mar Vista High School	18	Potable	0.016 (18)	0.045
County Sq. & Ralston Village Linear Park	25	Potable	0.014 (16)	0.039
Anacapa Middle School	35	Potable	0.013 (15)	0.036
Ventura Del Sol	31	Potable	0.012 (13)	0.034
Elmhurst Elementary	20	Potable	0.011 (12)	0.031
Memorial Park	51	Potable	0.010 (11)	0.028
Marion Cannon Park	23	Potable	0.010 (11)	0.028
Buenaventura Plaza	36	Potable	0.009 (10)	0.025
Webster Linear Park	28	Potable	0.009 (10)	0.025
Loma Vista Elementary	37	Potable	0.008 (9)	0.022
Will Rogers Elementary	40	Potable	0.008 (9)	0.022
Victoria Village	24	Potable	0.008 (9)	0.022
Mound Elementary	29	Potable	0.006 (7)	0.017
St. Bonaventure High School	38	Potable	0.005 (6)	0.014
Mission Park	52	Potable	0.004 (5)	0.011
Blanche Reynolds Park	41	Potable	0.003 (3)	0.008
County Square Building	26	Potable	0.003 (3)	0.008
Lincoln Elementary	53	Potable	0.001 (1)	0.003
Washington Elementary	54	Potable	0.001 (1)	0.003
Total			0.670 (750)	1.876
Potable			0.565 (632)	1.582
GMA			0.000 (0)	0.000
Mound			0.105 (118)	0.294

This strategy for expansion of reclaimed water use recognizes the economic and technical limitations of market development and promotes the growth of uses within the limitations of the mandated estuary discharge volumes.

Potential quantities of reclaimed water available from the Reclaimed Water Master Plan (adjusted for actual flows and losses where appropriate) are:

Year	Actual (or Projected) Wastewater Flow	Available for Reclamation (after losses and estuary)	Actual Reclaimed Water Uses	Projected Reclaimed Water Market[1]
1990	8.51 MGD	1.91 MGD	.84 MGD	
1995	8.40 MGD	1.80 MGD	.58 MGD	
1999	9.08 MGD	2.48 MGD	.90 MGD	
2000	9.30 MGD	2.70 MGD	.92 MGD	2.26 MGD
2010	13.00 MGD	6.4 MGD		2.26 MGD
2020	14.30 MGD	7.7 MGD		2.26 MGD
2040	16.90 MGD	10.3 MGD		2.93 MGD

[1] "Master Plan for Reclaimed Water System," Black and Veatch, 1992

In July 1999 the City reviewed the recommended improvements in the 1992 Mater Plan. It was noted that the recommended improvements were based on a number of assumptions such as the amount of available effluent and the potential use of reclaimed water by several large users. The City found that implementation of all the recommended improvements was not justified at that time because: (1) the amount of available effluent supply was less than anticipated; and (2) the proposed expansion of the golf courses currently using reclaimed water, would utilize most or all of the estimated available supply.

An analysis of the existing reclaimed water system was also completed at that time, to determine the recommendation for future expansion. Significant findings from the analysis were as follows:

- The available amount of reclaimed water supply is currently substantially less than the estimated amount per the Master Plan.
- The average maximum day demand for the entire system over the last three years is approximately 1 mgd.
- The current available supply of reclaimed water to customers above and beyond existing demands is approximately 1.2 mgd.
- Expansions of the golf courses currently using reclaimed water are scheduled to occur within the next two to four years. These expansions will use most or all of the estimated available supply.
- The current reclaimed water charges do not include enough revenue for expansion and/or upgrades to the existing reclaimed water system.

From the analysis the City Council adopted a policy for reclaimed water use. The policy allows the City to provide reclaimed water to new and existing potable water customers, thereby decreasing potable water demand. The City Council recognized that increased reclaimed water usage for landscape irrigation would assist the City in offsetting the need for an alternative water supply to meet future demands and would result in financial saving to its customers (Appendix F).

APPENDIX A

Fox Canyon Groundwater Management Agency

ORDINANCE NO. 8

AN ORDINANCE TO ADOPT THE FOX CANYON GROUNDWATER MANAGEMENT AGENCY CODE

The Board of Directors of the Fox Canyon Groundwater Management Agency ordains as follows:

1. The Board hereby repeals Ordinance Nos. 1.3, 3.2, 4.3 and 5.9, and

2. The Board will periodically review the effectiveness of this ordinance toward meeting its purpose and intent. This review shall occur at least once every five years. If necessary, this ordinance will be amended by the Board to ensure that the goals of the Agency are met.

3. The Board hereby adopts the Fox Canyon Groundwater Management Agency Ordinance Code as follows:

FOX CANYON GROUNDWATER MANAGEMENT AGENCY
ORDINANCE CODE
Adopted June 26, 2002

CHAPTER 1.0
Definitions

As used in this code, the following terms shall have the meanings stated below:

1.1 **"Agency"** means the Fox Canyon Groundwater Management Agency.

1.2 **"Agency Boundary"** where an outcrop exists means the outside edge of the horizontal surface exposure of the outcrop of the lower aquifer system. In areas where no outcrop exists, the boundary is the intersection of the vertical projection of the Fox Canyon Aquifer on the surface of the ground.

1.3 **"Agency Coordinator"** means the individual appointed by the Board to administer Agency functions.

1.4 **"Agricultural extraction facility"** means a facility whose groundwater is used on lands in the production of plant crops or livestock for market, and uses incidental thereto.

1.5 **"Annual"** means the calendar year January 1 through December 31.

1.6 **"Aquifer"** means a geologic formation or structure that yields water in sufficient quantities to supply pumping wells or springs. A confined aquifer is an aquifer with an overlying less permeable or impermeable layer.

1.7 **"Board"** means the Board of Directors of the Fox Canyon Groundwater Management Agency.

1.8 **"Developed Acreage"** means that portion of a parcel within the boundaries of the Agency that is receiving water for reasonable and beneficial agricultural, domestic or municipal and industrial (M & I) use.

1.9 **"East Las Posas Sub-basin"** That part of the former North Las Posas Basin that is East of the fault described by significant changes in groundwater levels and located for record purposes on maps in the Agency Offices.

1.10 **"Excess extraction"** means those extractions in excess of an operator's extraction allocation or adjusted extraction allocation.

1.11 **"Expansion area"** means the lower aquifer system (LAS) outcrop in the North and Northeasterly portion of the Agency plus the area "outside the outcrop". "Outside the outcrop" shall be defined as that area outside the Agency Boundary where the natural surface drainage allows surface water to flow into the Agency or where the groundwater gradient would allow groundwater to flow into the Agency. The width of this area, "outside the outcrop", shall not exceed a distance of 1.5 miles perpendicular to the Agency boundary. Map Number Two, entitled Fox Canyon Outcrop, Las Posas Basin, 1995 shows the expansion area and is available in the County Water Resources Division office.

1.12 **"Extraction"** means the act of obtaining groundwater by pumping or other controlled means.

1.13 **"Extraction allocation"** means the amount of groundwater that may be obtained from an extraction facility for a given calendar year, before a surcharge is imposed.

1.14 **"Extraction facility"** means any device or method (e.g. water well) for extraction of groundwater within a groundwater basin or aquifer.

1.15 **"Foreign Water"** means water imported to Ventura County through the State Water Project facilities or other water as approved by the Board.

1.16 **"Groundwater"** means water beneath the surface of the earth within a zone in which the soil is sufficiently saturated with water to allow collection and extraction.

1.17 **"Groundwater basin"** means a geologically and hydrologically defined area containing one or more aquifers, which store and transmit water yielding significant quantities of water to extraction facilities.

1.18 **"Historical extraction"** means the average annual groundwater extraction based on the five (5) calendar years of reported extractions from 1985 through 1989 within the boundaries of the Agency. This average will be expressed in acre-feet per year. ***All historical extraction allocations became effective on January 1, 1991.***

1.19 **"Inactive Well"** An inactive well is a well that conforms to the County of Ventura Ordinance Code requirements for an active well, but is being held in an idle status in case of future need. Inactive wells are not required to have a flow meter. Pumping to meet Ventura County Ordinance Code requirements shall not exceed 12 hours in a 12 month period. Meters shall be installed on inactive wells and the well shall revert to a groundwater extraction facility if the requirement exists to pump the well for more than 12 hours in any 12 month period. The pumping to meet Ventura County Ordinance Code requirements shall be for beneficial use and the 12 hour pumping limitation shall not be used to justify the lack of a meter for any well that serves a primary purpose. The application of an inactive well status implies that there is a minimum of one additional source of water to serve as a primary supply.

1.20 **"Injection/storage facility"** means any device or method for injection/storage of water into a groundwater basin or aquifer within the boundaries of the Agency.

1.21 **"Irrigated Agricultural Land"** means lands, which are designated as **Prime Agricultural Lands**, **Agricultural Lands of Statewide Importance**, or **Unique Agricultural Lands** as described by the Ventura County Agricultural Lands Conservation Program. As an additional qualification to meet this definition, all of the land must have received water for irrigation purposes at some time during the base period of 1985 - 1989.

1.22 **"LAS outcrop"** or **"outcrop"** means the area of Lower Aquifer System surface exposure as defined by Map Number One, Fox Canyon Outcrop, Las Posas Basin, 1982. This map is available for inspection in the Ventura County Water Resources Division office.

1.23 **"Metering Equipment"** or **"Meters"** means a manufactured instrument for accurately measuring and recording the flow of water in a pipeline.

1.24 **"Municipal and Industrial (M & I) Provider"** means a municipality, waterworks district, water company, mutual water company or person which provides water for domestic, industrial, commercial, or fire protection purposes within the boundaries of the Agency.

1.25 **"Municipal and Industrial (M & I) Operator"** An owner or operator that supplied groundwater for M & I use during the historical allocation period and did not supply water for agricultural irrigation during the historical period."

1.26 **"Municipal and Industrial (M & I) user"** means a person or other entity that used or uses water for any purpose other than agricultural irrigation. **"Municipal and Industrial (M & I) use,"** means any use other than agricultural irrigation.

1.27 **"Non-exempt well operators"** means all well operators except those operating extraction facilities supplying a single family dwelling on one acre or less, with no income producing operations and those operators granted an exemption by the Board of Directors.

1.28 **"Operator"** means a person who operates a groundwater extraction facility. In the event the Agency is unable to determine who operates a particular extraction facility, then

"operator" shall mean the person to whom the extraction facility is assessed by the County Assessor, or, if not separately assessed, the person who owns the land upon which the extraction facility is located.

1.29 **"Overdraft"** means the condition of a groundwater basin where the average annual amount of water extracted exceeds the average annual supply of water to a basin or aquifer.

1.30 **"Perched or Semi-perched Aquifer"** means the water bearing area that is located between the earth's surface and the clay deposits that exist above the Oxnard Aquifer in Sealing Zone III.

1.31 **"Person"** includes any state or local governmental agency, private corporation, firm, Partnership, individual, group of individuals, or, to the extent authorized by law, any federal agency.

1.32 **"Recharge"** means natural or artificial replenishment of groundwater storage by percolation or injection of one or more sources of water at the surface.

1.33 **"Safe Yield"** means the condition of groundwater basin when the total average annual groundwater extractions are equal to or less than total average annual groundwater recharge, either naturally or artificially.

1.34 **"West Las Posas Sub-basin"** That part of the former North Las Posas Basin that is West of the fault described by significant changes in groundwater levels and located for record purposes on maps in the Agency Offices.

CHAPTER 2.0
Registration of Wells and Levying of Charges

2.1 Registration of wells

2.1.1 All groundwater extraction facilities within the boundaries of the Agency shall be registered with the Agency within 30 days of notice given to the operator. The operator of an extraction facility shall register his extraction facility and provide the following information on a form provided by the Agency:

2.1.1.1 Name and address of the operator.

2.1.1.2 Name and address of the owner of the land upon which the extraction facility is located.

2.1.1.3 A description of the equipment associated with the extraction facility.

2.1.1.4 Location of the water extraction facility.

2.2 **Reporting Extractions.** The method for computing extractions shall be as specified by Chapter 3. The operator of a registered extraction facility shall file a groundwater extraction statement semi-annually with the Agency. Extraction statements shall cover the periods from January 1 to June 30 and from July 1 to December 31. Statements are due thirty (30) days following the end of each reporting period. Statements shall contain the following information on forms to be provided by the Agency:

2.2.1 The information required under 2.1.1 above.

2.2.2 The method of measuring or computing groundwater extractions.

2.2.3 The crop types or other uses and the acreage served by the extraction facility.

2.2.4 Total extraction of each extraction facility in acre-feet for the proceeding six (6) month period.

2.3 **Groundwater Extraction Charges**

2.3.1 All persons operating groundwater extraction facilities shall pay a groundwater extraction charge for all groundwater extracted after July 1, 1993, in the amount as established by Resolution of the Board. Payments are due semi-annually, and shall accompany the statement required pursuant to 2.2.

2.4 Payments not received or postmarked by thirty days after the end of each reporting period shall be charged interest in the amount of 1 1/2 percent per month, or part of month that the charge remains unpaid. Charges for pumping that are less than $50.00 must be reported, but will not accrue interest and will be deferred until the billing accumulates to $50.00. When the $50.00 minimum has been reached, the surcharge will be billed and interest will start to accrue when the bill is due and payable.

CHAPTER 3.0
Installation and Use of Metering Equipment for Groundwater Extraction Facilities

3.1 **Installation and Use of metering Equipment**

3.1.1 Installation Requirement. Operators of extraction facilities shall install metering equipment on each well that extracts groundwater. Meters are not required on for inactive wells as defined in this ordinance, nor are meters required for extraction facilities supplying a single family dwelling on one acre or less, with no income producing operations.

3.1.2 Back-up Metering Equipment. Water meters occasionally fail, losing periods of record before the disabled or inaccurate meter is either replaced or repaired. Well operators shall be prepared to provide another acceptable method of computing pumpage during these periods of meter failure to avoid the loss of record on wells that require metering under this ordinance.

3.1.2.1 Back-up Methods. Two acceptable back-up methods consist of using an hour meter and records on pumping rates or use of power company records and a pump efficiency test which is no more than one year old. It is the operator's responsibility to maintain the meter.

3.1.2.2 Special Cases. If special circumstances exist where neither of these back-up procedures can be used or are impracticable to use, the operator shall request Agency Coordinator's approval of another alternative back-up procedure.

3.1.3 Meter Readings. Functional meters shall be read and the readings reported semi-annually on the extraction statements required under 2.2. above.

3.2 **Implementation**

3.2.1 Metering Information. The Agency will obtain current information from meter manufacturers, distributors, or installers on meter specifications, availability and cost and will make this information available to well owners and operators on request.

3.2.2 Notification of Metering Equipment Requirement. Operators will be notified in writing of the metering equipment requirement following adoption of this ordinance by the Agency's Board of Directors.

3.2.3 Installation of Metering Equipment. Non-exempt well operators will be required to install metering equipment on said wells by July 1, 1994.

3.2.4 Inspection of Metering Equipment. The Agency may inspect metering equipment installations for compliance with this ordinance at any reasonable time.

3.3 **Altering Metering Equipment.** Any person who alters, removes, resets, adjusts, manipulates, obstructs or in any manner interferes or tampers with or procures or causes or directs any person to alter, remove, reset, adjust, manipulate, obstruct or in any manner interfere or tamper with any metering equipment affixed to any groundwater extraction facility required by this act, so as to cause said metering equipment to improperly or inaccurately measure and record said groundwater extraction is guilty of an intentional violation of this ordinance as described in Chapter 8.

CHAPTER 4.0
Protection of the South, East and West Las Posas Basins

4.1 This chapter has the following purpose and intent:

4.1.1. To eliminate overdraft from the aquifer systems within the boundary of the East and West Las Posas sub-basins and bring these sub-basins to a "safe yield" condition by the year 2010.

4.1.2 Protection of the Las Posas Basin outcrop as a source of groundwater recharge.

4.1.3 Preventing groundwater quality degradation by way of the expansion area.

4.1.4 This ordinance is only one means by which this goal will be met.

4.2 Las Posas Basin Anti-degradation and Extraction Prohibition

4.2.1 Prohibition

4.2.1.1 Except as permitted by 4.2.1.3 below, increasing the quantity of all types of groundwater use in the expansion area from extraction facilities located in the East or West Las Posas sub-basin is prohibited after June 30, 1988.

4.2.1.2 To qualify for expansion of agricultural groundwater use, irrigation systems consistent with best management practices and typical for permanently established citrus and avocado orchards in the area must be installed and trees must be planted prior to July 1, 1988. To qualify for expansion of a municipal or industrial groundwater use, a water system conforming to California Health and Safety Code and Uniform Plumbing Code requirements must be installed prior to the effective date of Ordinance 4, or must be installed and used to continuously supply the project with an adequate quantity of groundwater prior to July 1, 1988.

4.2.1.3 Subsequent to the effective date of this ordinance, any new use of water on the expansion area shall be specifically approved and conditioned by the Agency to:

4.2.1.3.1 Ensure that the outcrop is not exposed to potential degradation of water quality of any type.

4.2.1.3.2 Ensure that the ability of the outcrop to provide recharge by percolation is not diminished.

4.2.1.4 Groundwater from inside the Agency shall not be used on the expansion area of the East or West Las Posas Basin or any other area outside the Agency Boundary. As a minimum, these requirements shall preclude:

4.2.1.4.1 Uses on the outcrop that require groundwater in excess of the historical allocation or the granting of new baseline or new efficiency allocations.

4.2.1.4.2 Uses that reduce or lead to the reduction of the capability of the outcrop to provide recharge to the Lower Aquifer System.

4.2.2 Monitoring

4.2.2.1 The Agency will monitor the anti-degradation and extraction prohibition by regular review of discretionary permit applications to the Ventura County Water Resources and Engineering Department.

4.2.2.2 In addition to the above reviews, the Agency may conduct surveys of the expansion area.

4.3 East and West Las Posas Basins Extraction Facility Prohibition

4.3.1 New Extraction Facilities. New and replacement extraction facilities in the East or West Las Posas Basins to extract groundwater for use in the expansion area must be approved as provided by 4.3.2 below. Such facilities shall conform to the requirements of this and all other Agency Ordinances.

4.3.2 Permit Required. No operator or person shall construct a new extraction facility or a replacement extraction facility within the East and West Las Posas Basins after June 30, 1988 unless such work is done pursuant to an unexpired written permit for such work issued by the Agency. This paragraph does not provide authority to deny a well permit.

4.3.3 Permit Application. Application to construct an extraction facility shall be made to the Agency on the approved Ventura County Water Well Ordinance form available from the Ventura County Public Works Agency and shall include all information required by the Ventura County Well Ordinance and the following:

4.3.3.1 Location(s) of groundwater use including acreage accurately plotted on copy of the Ventura County Assessor's Parcel Map.

4.3.3.2 The proposed crop type(s) or Municipal and Industrial use(s) at each location.

4.3.3.3 A brief description of the type of irrigation or distribution system and metering equipment to be used.

4.3.3.4 The estimated average annual quantity of water use proposed for each location of use.

4.3.4 Monitoring. The Agency will monitor compliance with this Article by reviewing County well permit applications and reported groundwater extractions and by conducting necessary field surveys.

CHAPTER 5.0
Reduction of Groundwater Extractions

5.1 **Purpose.** The purpose and intent of this Chapter is to eliminate overdraft from the aquifer systems within the boundaries of the Agency and bring the groundwater basins to safe yield by the year 2010. This ordinance is only one means by which this goal will be met. It is not the intent or purpose of this ordinance to determine or allocate water right entitlements, including those which may be asserted pursuant to California Water Code sections 1005.1, 1005.2 or 1005.4.

5.2 **Extraction Allocations**

5.2.1 General

5.2.1.1 The Agency Coordinator shall establish an operator's extraction allocation for each extraction facility located within the boundaries of the Agency. The extraction allocation shall be the historical extraction as reported to the United Water Conservation District and/or to the Agency pursuant to Chapter 2 (or its successor), or as otherwise provided for in paragraph 5.6 of this ordinance.

5.2.1.2 Not withstanding any provision in this ordinance, the annual allocation shall be an allocation based on 60 percent irrigation efficiency of the current crop or the historical allocation, whichever is less. The irrigation efficiency for the operator's crop shall be determined using the formula described in paragraph 5.6.1.2.3. This 60 percent irrigation efficiency is totally unrelated to the 80 percent efficiency described in 5.6.1.2, "Annual Efficiency Extraction Allocation".

5.2.1.3 Where an operator operates more than one extraction facility, the extraction allocations for the individual facilities may be combined.

5.2.1.4 The Agency Coordinator may, on written request from a land owner or well operator, waive allocation requirements for the extraction of groundwater from the Perched or Semi-perched aquifer of Sealing Zone III when the pumping of that groundwater is specifically for the purpose of lowering the water table to reduce the high water table threat to property, including the root zone of crops, or for dewatering construction sites. The Agency Coordinator shall require that the groundwater extraction facility used for this purpose be perforated only in the Perched or Semi-perched zone, and shall also require the landowner and/or the operator to protect the Agency from damage potentially caused by transferring water to another location.

5.2.2 Necessity for Extraction Allocations.

5.2.2.1 No extraction facility may be operated or otherwise utilized so as to extract groundwater within the boundaries of the Agency without a valid extraction

allocation issued by the Agency or compliance with either paragraph 5.2.1.1 or 5.6 of this Ordinance.

5.2.3 Compliance. An operator shall comply with all provisions of this ordinance and all other Agency ordinances prior to receiving an extraction allocation.

5.2.4 Violation. Any operator or other person who violates the provisions of this Article is subject to the criminal and civil sanctions set forth in the Agency's enabling act and its ordinances.

5.3 Adjustments to Extraction Allocations

5.3.1 Adjustments to extraction allocations may be necessary to provide some flexibility, while still maintaining the goal of reaching a safe yield condition by the year 2010. Adjustments may be accomplished by a transfer or an assignment of historical extraction allocation from one operator to another.

5.3.2 Types of Adjustments

5.3.2.1 Municipal and Industrial (M & I) Transfer Adjustments. When irrigated agricultural land(s) changes to M & I use, an extraction allocation shall be transferred from the agricultural extraction facility(ies) to the M & I provider, in accordance with the following conditions:

5.3.2.1.1 Unless the M & I provider complies with the criteria set forth in 5.3.2.1.2 below, the agricultural extraction facility(ies) shall transfer to the M & I provider and the M & I provider shall receive the historical extraction allocation associated with the respective agricultural extraction facility(ies), up to a maximum of two (2) acre-feet per acre per year. Historical allocation in excess of two (2) acre-feet per acre per year shall be eliminated. Two (2) acre-feet per acre per year represents a reasonable use of water for M & I purposes. The following conditions shall apply to the transfer of allocation:

5.3.2.1.1.1 The transfer of allocation shall include the mutual consent of the owner(s) of the irrigated agricultural land(s) being transferred and the M & I provider. If the owner(s) of the agricultural extraction facility holding the historical allocation for the land being transferred is not the owner of the land being transferred, then the owner(s) of that extraction facility must also join the consent to transfer. The responsibility for obtaining all agreements to transfer allocation resides with the owners of the land and/or the M & I provider.

5.3.2.1.1.2 The Agency Coordinator must concur that the historical allocation to be eliminated is sufficient to have served the agricultural operation under the circumstances of service.

5.3.2.1.1.3 The transfer shall be effective when The M & I provider has annexed the irrigated agricultural land(s) to be transferred to M & I use and has provided written intent to provide water service to those land(s), or when the land is taken out of agricultural production.

5.3.2.1.2 An M & I provider shall receive two (2) acre-feet per acre per year for irrigated agricultural land(s) transferred to M & I use when all of the following conditions have been met:

5.3.2.1.2.1 The irrigated agricultural lands, which are the subject of transfer, are included in comprehensive water use study prepared by the M & I provider and approved by the Board after consideration in a public hearing. The study shall show the sphere of influence of the M & I provider and must demonstrate that the cumulative allocation transferred to M & I use includes an allocation of two acre feet per acre per year for all agricultural lands reported within the study boundaries and results in a net water savings to the GMA when compared to the historical extraction allocation assigned to wells that provide groundwater to all the agricultural lands reported in the study area. To the extent practical, the study shall rely on the historical water use data available from the GMA and shall include a clear designation for the study boundaries and the lands included in the analysis; and identification of any data or assumptions relied upon which are not a part of the GMA database.

5.3.2.1.2.2 The transfer of allocation shall include the mutual consent of the owner(s) of the irrigated agricultural land(s) being transferred and the M & I provider. If the owner(s) of the agricultural extraction facility holding the historical allocation for the land being transferred is not the owner of the land being transferred, then the owner(s) of that extraction facility must also join the consent to transfer. The responsibility for obtaining all agreements to transfer allocation resides with the owners of the land and/or the M & I provider.

5.3.2.1.2.3 The Agency Coordinator must concur that the historical allocation to be eliminated is sufficient to have served the agricultural operation under the circumstances of service.

5.3.2.1.2.4 The transfer shall be effective when the M & I provider has annexed the irrigated agricultural land(s) to be transferred to M & I use and has provided written intent to provide water service to those land(s), or when the land is taken out of agricultural production.

5.3.2.2 Assigned Extraction Allocation Adjustments. Except as provided by other assignment and, or adjustment procedures, an Operator A may assign an extraction allocation to Operator B as long as Operator B provides water to Operator A equal in amount to the full assigned extraction allocation. In order to prevent the creation of a secondary market in extraction allocations, upon the change of ownership of either property, the assigned extraction allocations revert to Operator A. The assigned extraction allocations may subsequently be re-assigned by the new owner.

5.3.2.3 Adjustments to M & I Allocations. The Board may adjust the historical allocation of an M & I operator when that operator has supplied groundwater to an M & I user during the historical allocation period and discontinues service to the M & I user for any reason. This adjustment may be made by transferring the supplied portion of the historical allocation from the M & I operator to the M & I user. This adjustment will avoid increased pumping due to windfall allocations that could otherwise result when the M & I operator discontinues service. To avoid retroactive inequities, where an M & I operator has discontinued service to an M & I user prior to September 1, 1994, the amount of the supplied portion of the historical allocation will be allocated to both the M & I operator and the M & I user.

5.3.2.4 Transfer of Allocation. Upon request, the Board may transfer allocation provided there is a net benefit to the aquifers within the GMA. The transfer of allocation will be of indefinite duration, approved on a "case-by-case" basis, and the GMA Coordinator shall determine the rate of extraction and the point or points of extraction. Requests for the transfer of allocations shall be submitted jointly by the parties involved and shall include the specific details of their proposal. To ensure that there is a net benefit to the aquifer systems, transfers of allocation shall be subject to other conditions as approved by the Board.

5.3.2.5 Historical allocation is subject to adjustment as provided in 5.4 below.

5.3.3 Procedures for Adjustment

5.3.3.1 Procedures for adjusting extraction allocations will be accomplished using the following procedure:

5.3.3.1.1 It shall be necessary for the operator of the extraction facility to file a verified Application for Adjustment with the Agency Coordinator.

5.3.3.1.2 Adjustments of extraction allocations, pursuant to the Applications for Adjustment, shall be considered for approval by the Board after reviewing the findings and recommendations of the Agency Coordinator and, if approved, shall be effective for the remainder of the calendar year and for all subsequent calendar years until modified by a subsequent Board approved adjustment.

5.4 Reduction of Extraction Allocations

5.4.1 Unless otherwise exempted, historical extraction allocations, adjusted or otherwise, shall be reduced in order to eliminate overdraft from the aquifer systems within the boundaries of the Agency for agricultural and M & I uses. The reductions shall be as set forth below:

1992 - 1994 extraction allocation = 95% of historical extraction, as adjusted.
1995 - 1999 extraction allocation = 90% of historical extraction, as adjusted.
2000 - 2004 extraction allocation = 85% of historical extraction, as adjusted.
2005 - 2009 extraction allocation = 80% of historical extraction, as adjusted.
After 2009 extraction allocation = 75% of historical extraction, as adjusted.

5.5 Exemptions from Reductions

5.5.1 Certain types of extraction allocations are exempt from the reductions set forth in 5.4.1. They are set forth below:

5.5.1.1 Baseline Extraction Allocations - as set forth in 5.6.1.1.

5.5.1.2 Annual Efficiency Extraction Allocations - as set forth in 5.6.1.2.

5.5.1.3 Non-metered Extraction Facilities. Reductions in extraction allocations shall not apply to those extraction facilities as identified in Chapter 3 that do not require meters. Neither retroactive adjustments nor refunds will be made, except that any outstanding surcharges for non-metered extractions that have not been paid on the effective date of this ordinance will be waived.

5.6 Alternative Extraction Allocations

5.6.1 As an alternative to historical extractions, the Agency Coordinator may establish a Baseline, or Annual Efficiency extraction allocation for an operator, as follows:

5.6.1.1 Baseline Extraction Allocations. If no historical extraction exists, an operator may request that a Baseline extraction allocation be established by the Agency Coordinator at one (1) acre-foot per acre per year for developed acreage that relies solely on groundwater. A Baseline extraction allocation may also be established by the Agency Coordinator at one (1) acre-foot per acre per year for lands, which are developed after the effective date of this ordinance, regardless of the source of water.

5.6.1.1.1 To obtain a Baseline extraction allocation, an operator must submit a detailed report to the Agency Coordinator. The report shall describe historical extractions, if any, groundwater use during the period between the end of calendar year 1984 and the end of calendar year 1989, future water requirements, type and amount of water use, crop type and acreage involved. The report shall include copies of Assessor's maps identifying the parcels where groundwater is presently being used. For the purpose of this ordinance, one (1) acre-foot per acre per year represents a reasonable use of water for a Baseline extraction allocation.

5.6.1.2 Annual Efficiency Extraction Allocation. If an operator can demonstrate to the Agency Coordinator that water used for agriculturally developed land is at least 80 percent overall irrigation efficient, based on evapotranspiration requirements, an Annual Efficiency extraction allocation shall be established for one calendar year. An 80 percent overall irrigation efficiency has been determined by the Agency to be reasonable on agricultural lands within the Agency's boundaries.

5.6.1.2.1 To prove that irrigation efficiency is at least 80 percent, the operator must submit a detailed report covering a minimum period of the immediately preceding calendar year. This report shall be submitted to the Agency Coordinator no later than February 1st of the following year unless otherwise extended by the Board of Directors. The report shall include a complete crop and irrigation history for the extraction facility and acreage involved. The report shall include the reference evapotranspiration (ETo) rates and crop factors (Kc) for the calendar year period similar to that provided by the California Irrigation Management Information System (CIMIS) as developed and modified by the California Department of Water Resources. The report shall include a summary sheet that compares the water use to the evapotranspiration requirements for each crop and the corresponding acreage covered in the calendar year.

The Board may extend the time to apply for an efficiency allocation for any year. Failure to submit the required form by the specified due date shall result in a late fee of $150 per month for each month that an application for an efficiency allocation is not submitted. This late fee shall apply for a period of six months, after which an efficiency allocation shall no longer be available unless specifically approved by the Board.

5.6.1.2.2 Irrigation efficiency will include an appropriate amount of water necessary to avoid salt build-up based on the quality of irrigation water used.

5.6.1.2.3 Irrigation Efficiency (I.E.) will be calculated using the following formula:

$$I.E. = \frac{[ETo \times Kc] - ER \times 100}{\text{Actual Water Applied (inches)}}$$

Where:

ETo is the reference evapotranspiration measured in inches using turf grass as a standard.

Kc is a crop factor, which is a dimensionless number that relates water use by a given plant in comparison to turf grass.

ER is the effective rainfall measured in inches as determined by the Agency Coordinator.

5.6.1.3 Exceptions. The Board may grant exceptions to 5.6.1.1 and 5.6.1.2 on a case-by-case basis. However, individual exceptions shall not become the norm. Where agricultural efficiency cannot be measured as set forth in 5.6.1.2, then the most efficient practices of record for the type of agricultural use shall be the measurement of efficiency utilized by the Board in its deliberations.

5.7 **Credits**

5.7.1 Credits can be obtained by operators, but are not considered as extraction allocations or adjustments to extraction allocations. Credits are not subject to any reductions as set forth in 5.4.1. However, at the operator's option, credits can be saved or used to avoid paying extraction surcharges. Credits shall be accounted for through the normal reporting and accounting procedure and are carried forward from year to year. Credits can be transferred, but only between commonly operated extraction facilities with the approval of the GMA Coordinator. Upon request, the Board may transfer credits provided there is a net benefit to the aquifers within the GMA. The transfer of credits will be of indefinite duration, approved on a "case-by-

case" basis, and the GMA Coordinator shall determine the rate of extraction and the point or points of extraction. Requests for the transfer of Credits shall be submitted jointly by the parties involved and shall include the specific details of their proposal. To ensure that there is a benefit to the aquifer systems, transfers of credits shall be subject to other conditions as approved by the Board. Under no circumstances shall credits earned as a result of agricultural use be transferred to an M & I Provider, M & I Operator or an M & I User unless the transfer is specifically approved by the Board and a net benefit to the aquifer systems involved can be shown. The types of credits are:

5.7.1.1 Conservation credits. An operator can obtain conservation credits by extracting less groundwater than the historical extraction allocation. No conservation credits will be given to an operator with an Annual Efficiency, Baseline, or for an extraction facility that is not required to have a meter. Credits shall be determined by the Agency Coordinator after submission of annual extraction data. Subsequent to determining the amount of credits earned, a confirmation shall be mailed to the pumper showing the current allocation, the groundwater extracted during the previous calendar year, and the credits or surcharges for the previous year. This confirmation must be signed by the owner/operator and returned to the GMA with any surcharge payment within thirty days (30) of the date the confirmation was mailed to the owner/operator by the GMA. Proof of the date of return will be by the postmark of the returned confirmation. If the confirmation is not returned within 30 calendar days, the credits earned for the previous year will no longer be available, or interest shall begin to accrue on surcharges due.

5.7.1.2 Storage credits. An operator can obtain storage credits for foreign water injected or spread and percolated in a Board approved injection/storage facility. The Agency Coordinator will determine the amount of storage credits based upon documentation of expected losses provided by the operator seeking the storage credit. A written application for approval of an injection/storage facility shall include:

5.7.1.2.1 Operator of proposed project.

5.7.1.2.2 Purpose of proposed project.

5.7.1.2.3 Location, depth, casing diameter, perforated interval and other information regarding proposed injection/extraction facilities, if applicable.

5.7.1.2.4 Method of operation including source, quantity and quality of water, planned scheduling of injection/extraction or percolation operations and proposed use of extracted water.

5.7.1.2.5 Any other information deemed necessary by the Agency Coordinator.

5.7.4.2.6 Following Board approval of the application, successful injection of water and reporting of results, an operator will obtain credit as determined by the Agency Coordinator.

5.8 Extraction Surcharges and Late Penalty

5.8.1 Necessity for Surcharges

5.8.1.1 Extraction surcharges are necessary to achieve safe yield from the groundwater basins within the Agency and shall be assessed annually when annual extractions exceed the historical and/or baseline allocation for a given extraction facility or the combined sum of historical allocation and baseline allocation for combined facilities. The extraction surcharge shall be fixed by the Board and shall be based upon (1) the cost to import potable water from the Metropolitan Water District of Southern California, or other equivalent water sources that can or do provide non-native water within the Agency jurisdiction; and (2) the current groundwater conditions within the Agency jurisdiction.

5.8.1.2 The Board shall fix the surcharge by resolution at a cost sufficiently high to discourage extraction of groundwater in excess of the approved allocation when that extraction will adversely affect achieving safe yield of any basin within the Agency and may adjust the surcharge by resolution; provided however, that the then existing extraction surcharge shall remain in effect until adjusted by the Board.

5.8.1.3 Surcharge for No Allocation. In circumstances where an individual or entity extracts groundwater from a facility(s) having no valid extraction allocation, the extraction surcharge shall be applied to the entire quantity of water extracted. Imposition and acceptance of payment of the surcharge imposed on an individual or entity who extracts water from a facility(s) that holds no extraction allocation shall not be deemed a waiver of the Agency's authority to limit or enjoin the unauthorized extractions.

5.8.1.4 Efficiency Surcharge Facilities relying on the annual, efficiency, allocation shall also be subject to surcharge for inefficient use. The extraction allocation for efficiency is the amount of water used at 80% efficiency as defined in 5.6.1.2 of this ordinance. Extraction surcharges will be applied to the difference between the water extracted which correlates with the actual efficiency achieved and the water that would have been extracted to attain the 80% efficiency allocation. For example, an actual efficiency of 70% would be subject to surcharges on the difference between the amount of water used at 70% efficiency and the amount of water that would have been used at 80% efficiency. If an efficiency of less than 60%

is achieved, no efficiency allocation will be available, and the operator shall revert to a historical, baseline or to no allocation whichever applies to that facility. Extraction surcharges would then apply to the difference between actual water used and the applicable allocation, if any. For example, a facility operating at an actual efficiency of 59%) with no historical or baseline allocation, would be subject to surcharges on all water used.

5.8.2 Payment of Extraction Surcharges

5.8.2.1 Payment of Extraction. Surcharges shall be assessed annually and shall become due and payable by the owner/operator within 30 days of date the confirmation of credits form was postmarked. Payments shall normally be made with credits, if available. Credits may be retained if a special arrangement is made to pay with cash. The Board may extend the 30-day time allowed to pay surcharges for a period of up to twelve months when circumstances exist that in the opinion of the Board warrant such extension. The Board may also approve the payment of surcharges in installments of up to 24 months with terms suitable to the Board.

5.8.2.2 Deferral of Charges. Surcharges that are less than $50.00 will be deferred until the total accumulated surcharge owed reaches $50.00. No interest will be charged until the account has accumulated to the $50.00 minimum. When the $50.00 minimum has been reached, the surcharge will be billed and interest will start to accrue when the bill is due and payable.

5.8.3 Late Penalty. The operator shall pay a late penalty for any extraction surcharge not satisfied by the due and payable date. The late penalty shall be 1 1/2 percent per month, or any portion thereof, of the amount of the unsatisfied extraction surcharge. The Board may waive interest for surcharges and pumping fees when circumstances exist to render the charge inappropriate.

5.8.4 Collection of Delinquent Extraction Surcharges and Late Penalties. The Board may order that any given extraction surcharge and/or late penalty shall be a personal obligation of the operator or shall be an assessment against the property on which the extraction facility is located. Such assessment constitutes a lien upon the property, which lien attaches upon recordation in the office of the County Recorder. The assessment may be collected at the same time and in the same manner as ordinary ad valorem taxes are collected, and shall be subject to the same penalties and the same procedure and sale, in case of delinquency as provided for such taxes. All laws applicable to the levy, collection and enforcement of ad valorem taxes shall be applicable to such assessment, except that if any real property to which such lien would attach has been transferred or conveyed to a bona fide purchaser for value, or if a lien of a bona fide encumbrance for value has been created and attaches thereon, prior to the date on which the first installment of such taxes would become delinquent, then the lien which would otherwise be imposed by

this section shall not attach to such real property and an assessment relating to such property shall be transferred to the unsecured roll for collection.

5.8.5 Use of Extraction Surcharges and Late Penalties. Revenues generated from extraction surcharges and late penalties shall be used exclusively for authorized Agency purposes, including financial assistance to support Board approved water supply, conservation, monitoring programs and water reclamation projects that demonstrate significant reductions in overdraft.

CHAPTER 6.0
Appeals

6.1 Any operator aggrieved by a decision or determination made by the Agency Coordinator may appeal to the Board within thirty (30) calendar days thereof by filing with the Agency Coordinator a written request that the Board review the decision of the Agency Coordinator. The Board shall act on the appeal within 120 days after the filing.

CHAPTER 7.0
Severability

7.1 If any section, part, clause or phrase in this ordinance is for any reason held invalid or unconstitutional, the remaining portion of this ordinance shall not be affected but shall remain in full force and effect.

CHAPTER 8.0
Penalties

8.1 Any operator or person who intentionally violates any provision of this ordinance shall be guilty of an infraction and may be required to pay a fine to the Agency in an amount not to *exceed five hundred dollars ($500).*

8.2 Any operator or person who negligently or intentionally violates any provision of this ordinance may also be liable civilly to the Agency for a sum not to exceed one thousand dollars ($1000) per day for each day of such violation, in addition to any other penalties that may be prescribed by law.

8.3 Upon the failure of any operator or person to comply with any provision of this ordinance, the Agency may petition the Superior Court for a temporary restraining order, preliminary or permanent injunction, or such other equitable relief as may be appropriate. The right to petition for injunctive relief is an additional right to those which may be provided elsewhere in this ordinance or otherwise allowed by law. The Agency may petition the Superior Court of the County to recover any sums due the Agency.

This ordinance shall become effective on the thirty-first day after adoption.

ADOPTED this 26th day of June, 2002 by the following vote:

AYES: Directors Lynn Maulhardt, Mike Conroy, John Flynn and Al Fox

NOES: None

ABSENT: Director Roseann Mikos

Lynn Maulhardt, Chair - Board of Directors
Fox Canyon Groundwater Management Agency

ATTEST: Karen Schoonover
Karen Schoonover, Clerk of the Board

FOX CANYON GROUNDWATER MANAGEMENT AGENCY

A State of California Water Agency

NOTICE OF MEETING

NOTICE IS HEREBY GIVEN that the Fox Canyon Groundwater Management Agency (FCGMA) Board of Directors will hold its regular monthly **Board Meeting** at **1:30 P.M.** on **Wednesday, December 15, 2004** in the **Board of Supervisors Hearing Room**, at the Ventura County Government Center, Hall of Administration, Main Plaza Level at **800 South Victoria Avenue, Ventura, California**.

Board Members: Please contact the Agency Coordinator by phone at (805) 648-9204 or via FAX at (805) 654-3350 by Monday before the meeting if you are unable to attend.

NOTE: For more information, full agenda packets, or weather data, visit our WEB pages at ***www.foxcanyongma.org*** or at ***http://publicworks.countyofventura.org/fcgma***

FCGMA BOARD AGENDA

December 15, 2004

1. **Call to Order** - Chairman of the Board will call the meeting to order.

2. **Pledge of Allegiance** - Board member will lead the Pledge of Allegiance.

3. **Roll Call** - Attending Board members and Alternates will be recorded by the Board Clerk.

4. **Approval of Minutes** - Approve minutes from the Special October 6, 2004 Board Meeting and the October 28, 2004 regular FCGMA Board Meeting.

5. **Public Comment** - Audience members may speak about FCGMA-related matters not on today's Agenda. California State law does not allow any response or action from the Board at this time, however topics can be placed on future agendas or referred to staff. Please come to the podium, and state your name and affiliation for the record before commenting on any particular subject.

(Note: The Board reserves the right to limit each speaker to five (5) minutes per subject or topic if necessary). The audio portion of every public meeting of the Board of Directors is recorded. In compliance with the Americans with Disabilities Act, all possible accommodations will be made for individuals with disabilities so they can attend and participate in meetings. If special assistance is needed, please call the Agency staff at (805) 654-2327 at least 24 hours prior to the meeting so arrangements can be assured. If requested, and as possible, Agenda's will be provided in alternative formats.

6. **Board Member Comments** - (An opportunity for Board Members to comment on or communicate with other directors, staff and/or the public regarding non-agenda topics).

ACTION ITEMS:

7. **Next 5% Cutback in Historical Allocation** - Receive a presentation from Dr. Steve Bachman and direct or delay implementation of the next 5% cutback scheduled to take effect on January 1, 2005.

8. **Evapotranspiration (Et) Interim Data Contract** - Direct extension of interim data contract to continue to collect and record weather station information.

9. **Changes to the Ordinance Code** – Review proposed changes to the Ordinance Code and discuss the scheduling of a workshop and a first reading.

10. **Pumping Fees for Calendar Year 2005** - Adopt Resolution 2004-9 to increase the pumping fee to $4.00 per acre-foot.

INFORMATIONAL ITEMS:

11. **Weather Stations Report** – FCGMA Weather Stations Report for November 2004.

12. **Financial Status Report** – Agency budget progress as of October 2004 (financial period 04-04).

13. **Adjournment of Open Session** - until the next regularly scheduled meeting of the Board on Wednesday, January 26,2005.

CLOSED SESSION MEETING:

1. **Conference with Legal Counsel re: Anticipated Litigation (Gov. Code, 54956.9)** – Consider initiation of litigation pursuant to subdivision (c) of Section 54956.9: (one potential case).

2. **Adjournment of Closed Session** - until the next required closed meeting of the Board.

FOX CANYON
GROUNDWATER MANAGEMENT AGENCY
A STATE OF CALIFORNIA WATER AGENCY

MINUTES

Minutes of the Fox Canyon Groundwater Management Agency's (FCGMA) regular Board meeting held Wednesday, **December 15, 2004** in the Board of Supervisor's Hearing Room at the Ventura County Government Center, Hall of Administration, 800 South Victoria Avenue, Ventura, California.

1. Call to Order

Chairman Maulhardt called the meeting to order at 1:35 p.m.

2. Pledge of Allegiance

Dr. Mikos led the Pledge of Allegiance.

3. Roll Call

John Flynn
Al Fox
Roseann Mikos
Lynn Maulhardt
David Schwabauer
(Alternates Sam McIntyre and Dan Naumann were in the audience)

Staff Members
Lowell Preston, Agency Coordinator
David Panaro, Staff Geologist
Tony Waters, Agency Counsel
Kathy Miller, Clerk of the Board

4. Approval of Minutes

Dr. Mikos asked if there should be a mention of going into closed session after their last meeting. She wondered if there should be an extra report since they discussed another item.

Counsel Waters said that a closed session at the end of today's regular Agenda would cover that, and no announcements would be made at the end of the closed session.

Dr. Mikos said that the meeting before that had a closed session Item, mentioned it on the agenda in the minutes that they had gone into close session on the Item number and there was no action to report.

Counsel Waters replied that there didn't need to be any more mention because that would defeat the purpose of a closed session.

Chairman Maulhardt explained that Dr. Mikos was asking if it should just be an Item that they were adjourning to closed session in the minutes as it was in the agenda. He directed staff to add a mention of the closed session in the minutes, and they were approved with the understanding that such changes would be made.

5. Public Comment

None

6. Board Member Comments

Dr. Mikos asked if staff got the North Park Lake development changes from the City of Moorpark? She wondered if GMA Staff could include any of the new information to report at the next Board meeting?

Dr. Preston reported that he had indeed reviewed information from the City and he would have comments available to the Board at the next session.

ACTION ITEMS:

7. Next 5% Cutback in Historical Allocation

Dr. Preston announced that there were pros and cons for implementing the 5% cutback that was to happen in less than two weeks. On the con side they were talking very small amounts of water, but on the pro side they needed even small amounts. He thought the Board would be in a better position to choose the action after Dr. Bachman made his presentation.

Dr. Bachman stated that the issues surrounding the 5% cut were technical, policy, and financial. He showed some slides of water levels and the extent of seawater intrusion that indicated the situation is more severe than last year, especially in the southeast corner of the Oxnard Plain. The severity is more widespread in the UAS than originally perceived, and even worse in the LAS.

Water levels have been dropping due to the present dry period, and with water levels currently below sea level, chloride levels are gradually increasing making that part of the aquifer of no beneficial use.

The Lower Aquifer has a big trough sitting all the way from the South Oxnard Plain to underneath the City of Camarillo. A NE to SW trending fault (probable extension of the

Simi-Santa Rosa Fault Zone) separates the lower aquifer from the Forebay and also the SE part of the Oxnard Plain. The southeast Oxnard Plain and Pleasant Valley basins are across that fault making it difficult for recharge to occur. Because of the low water levels in the PVCWD area, some of the water coming up might be partially oil field brine since the oil fields were not too far below. In the southern area the issue was mostly seawater intrusion.

Basically the upper aquifer is looking good, but in the south part of the Oxnard Plain, the lower aquifer had the fault interfering with recharge. In future projects, the most effective way of dealing with the lower aquifer across the fault would be to bring deliveries across the fault moving water through pipelines. The new UWCD Saticoy Well Field could pump water out of the Forebay when levels were higher for supply down to the lower aquifer. The Conejo Creek Project has been working very well by using some of the water out of Conejo Creek for Pleasant Valley.

It is estimated that some 35,000 AFY is pumped from the LAS, and another 10% cutback would be somewhere around 3,500 AFY. The cuts are primarily hitting M & I operators since most of agriculture is on efficiency, and the cuts had already been made there. The continuing GMA cutbacks are an important part of solving the overdraft problem, but it is not the only solution. From a technical standpoint the cuts were necessary but from a policy standpoint the Board would have to make that decision. On the financial side it was an expensive proposition for M & I pumpers since they had to find an alternate source of water that would mean real dollars.

Dr. Mikos asked how much of the solution had already been accomplished with the efficiency for agriculture?

Dr. Bachman replied that agriculture's role had been accomplished by looking at what the crop demand should be verses what the irrigation actually was. Comparing the two he had calculated that there had been a 20 to 25 percent reduction in agricultural water use, mostly due to cost saving measures and not because of the GMA cutbacks. The obvious way to reduce the overdraft was to reduce the pumping, but he believed there would be additional water conservation in the future from agriculture.

Rob Saperstein with the City of Oxnard asked if they had tried to isolate geographically and create percentaged proportionalities of where the cutbacks would have impacts if they did institute the next 5% across the board. It impacted United in the Forebay and some of the Oxnard wells that he thought were on the northwest side of the fault and wondered if there was much municipal pumping on the south side either upper or lower that would really contribute meaningfully to the area that was most in jeopardy.

Dr. Bachman replied that the geographic distribution was actually an issue. He had been asked if there were some places where it wouldn't matter to cut back and instead of looking at the common pool of everyone doing the same cutback, would it make more sense that some places get cut back and others not. We are starting to ask the Forebay to do a lot more than in the past. The M & I Supplemental Water Program, that was

starting to run, included more M & I pumping out of the Forebay through the O/H system. Asking the Forebay to carry a lot of the burden in the future may not work out as planned.

Frank Brommenschenkel commented that there were some small companies in the El Rio area that did not have an alternate source of water, and who would probably continue pumping regardless and have to find some additional allocation or pay a surcharge. He asked if it was better that they used more water than less as a dilution factor for water quality reasons as long as they were un-metered in that area?

Dr. Bachman explained that moving more water through the system would be better for dilution. That is not a technical issue, but a policy issue that he wouldn't be the one to answer.

Dr. Preston mentioned that if the Board decided to waive the 5% cut it would require an Ordinance change and if they made an Ordinance change they might have difficulty using the standard CEQA wording that said they were exempt.

Mr. Saperstein said he would set aside agricultural use and differentiate that from the contribution the M & I users had to make. He was convinced that agricultural users were doing all they could whether they were on efficiency or allocation because money, crop and growth issues had forced them to be as efficient as they could be. He didn't think it would happen by the GMA being more forceful, except for more enforcement of the metering of agricultural use and calibration of the meters. The City of Oxnard was looking at making a connection from the Oceanview system to the PTP system sooner rather than later. Originally it had been planned for the second phase of the GREAT Program when there would be a larger quantity of recycled water available. They would be converting the Oceanview system to a true agricultural delivery system so they could bring in more Forebay water, then eventually backfill it with recycled water to both the PTP and Oceanview systems where some of the agricultural users were in the problem area.

Because of the GMA cutbacks, Oceanview was 100% reliant on United Water and United Water was getting increasingly more expensive forcing Oceanview users off the Oceanview system to drilling wells in the exact areas the GMA is concerned with. The artificial inflation of the cost of water was an unintended consequence of the M & I cutbacks. There were also small users on the O/H system that were in the same circumstance. Both the cost of water and the allocation that's available to them has already put them in the hole, running up a potential credit deficit on the O/H system and the next 5% cutback would be devastating to them. These companies were small potatoes using only about 100 to 200 AFY. A 5% cut would be 20 AFY at $725.00/AFand would present a significant cost burden on them with no measurable water supply benefits to the basin by relieving them or imposing the next 5% increment.

Chairman Maulhardt asked Counsel Waters if the Board had the power to pick and choose where they wanted to apply the Ordinance, or if they could suspend or delay it for some time. He explained that they were in the process of looking at a whole series of

changes to the Ordinance Code. He wondered if they could delay the implementation while they dealt with some of the changes.

Counsel Waters stated that the existing Ordinance Code Section 5.4.1 said, "Unless otherwise exempted, there shall be the reductions." And the very next section indicated what the exemptions were, listed in 5.5, they were essentially three fold: the baseline extraction, the annual efficiency extraction, and the non-metered extraction. Those were the exemptions to which the phrase "unless otherwise exempted" apply. Currently the Ordinance would tolerate a delay in implementation, but it could be revised to make more discretionary decisions. He felt that to the extent that it didn't negatively affect somebody he thought it could be retroactive.

Tom Smith, City of Camarillo, Water Division, said he wanted to go on record sharing what the City of Camarillo was doing for a number of years in terms of water conservation and efficient use of the groundwater supply. They were one of the few cities still writing violations to customers for water waste if they were doing things against the City's Ordinance. An efficiency mode that they were progressively working toward was the use of reclaimed water. A new complex was being built in the city and significant amounts of reclaimed water would be used in that tract of homes consisting of about 400 acres of land. They were also looking at the treatment of groundwater. There is an area of the city in the northeast corner where the water tables had come up significantly since the mid 1990's. The groundwater however was very poor and they were going to have to spend significant dollars to make it potable for their customers. The bottom line was that the City of Camarillo was taking very aggressive moves to use what they had as efficiently as possible.

Dr. Bachman agreed that there was an exception in the South Las Posas Basin about potentially pumping the poor quality water out of the shallow aquifer. Camrosa was looking at a similar situation down by the Channel Islands University where the shallow aquifers were being filled because Calleguas Creek had more water in it from reclaimed water and other factors. That may be a place where an exception might be made about the amount of pumping and cutbacks as long as the shallow aquifers were not particularly benefiting the main aquifers that have the problems.

Mr. Saperstein stated that he thought the two sections Counsel Waters had cited should be read completely apart from one another. The exemptions from reductions that Counsel had referred to in Section 5.5 were absolute exemptions from reductions in every case. Baseline allocation, annual Efficiency Allocation, or non-metered exempt extraction facilities were never subject to the 5% reductions. That section "exemptions from reductions", are set aside 100%. The sentence "unless otherwise exempted" was not referring to those exemptions in 5.5, but the Board's discretion to choose to exempt at any given time. He thought it was pretty clear the two sections were to be read separate from one another.

Counsel Waters announced that he stood corrected and agreed that what Mr. Saperstein had explained was clear also. The key word referenced in Mr. Saperstein's comment was the "countdown over the 25-year period applied to Historical allocations".

Chairman Maulhardt reiterated that they could suspend the whole reduction or delay it by a period of time. He then suggested that they suspend for a year, applying the 5% cutback and allow the process of bringing the Ordinance Code on line.

Dr. Mikos said she would like to go on record as saying that if they end up deciding to require the reduction at one place and not another, and the analysis ended up showing that one set of pumpers would have to take a giant hit worse than anybody else, then there might be something in-between not like what they have now or were thinking. The concept of everybody paying their own fair share and sharing the pain was initially a good concept, unless it put a certain group of people out of business because of the amount was so great. She wanted the Board to keep in mind that there might be an intermediate solution.

Chairman Maulhardt replied that they needed to make changes to the Ordinance Code, then come back and make the determination which of the cutbacks makes sense from a technological standpoint. Their responsibility had always been to bring the aquifers into safe yield, and if it meant that in certain areas they would have to make adjustments more aggressively, they would do that. When the Board first created Ordinance 5 they addressed the issue of some people having more pain than less. The major cities, Ventura, Oxnard, and Camarillo came together and after long discussions, the final conclusion was that as a community they all wanted sustainable agriculture. Efficiency was the way to do that, and if the cities decided they wanted to build houses that people decided they wanted to move into, in Ventura County into the M & I area, then it was the M & I people that had the financial power that would have to find new sources of water. They would not be able to suck the aquifer dry and put farming out of business. When the cities finally came to that conclusion, it was recognized that they would not be entitled to efficiency, and they would be impacted by cutbacks. The cities had the financial clout to go out and find additional water or the motivation to do what the Cities of Camarillo, Oxnard, and Port Hueneme were doing to create a long-term solution.

Chairman Maulhardt asked the Board which of the three choices they preferred, to implement the 5% cutback, not implement, or delay for one year the implementation. They decided to delay the cutbacks and Director Fox made the motion to delay for 12 months until January 1, 2006, Director Schwabauer seconded the motion. A role call found them all in favor.

8. Evapotranspiration (Et) Interim Data Contract

Chairman Maulhardt explained that they needed to extend the ET contract for another six months until they worked out the details of how they would eventually replace it. He asked for a motion and Director Flynn so moved and Dr. Mikos seconded the motion. All were in favor.

Mr. Chris Peek will be allowed to operate the weather stations for another 6 months while working to find a replacement firm or operator.

9. Changes to the Ordinance Code

Dr. Preston explained that he was requesting direction to hold a workshop early in January and schedule the Ordinance for a first reading on January 26, their regular meeting date in January. He expressed his feelings that he was hoping they could rush getting the new provisions in place.

Chairman Maulhardt instructed them to figure out a date, time, and place in January and told Dr. Preston to be prepared at the meeting to give them a final official verbiage of how they were to refer to their references of the Ordinance Code. He said he was in favor of an early workshop and setting it up for a first reading.

Dr. Mikos requested that the workshop be on January 3,10, or 17 because those were the days she could personally go. Dr. Preston promised to accommodate those dates if possible.

10. Pumping Fees for Calendar Year 2005

Dr. Preston announced that it was their last chance to set a higher fee for pumping for the next year. He said there was a potential of litigation looming that they had no solution for at this time and there was no estimate of how much it might cost. If not for the potential litigation, the GMA could probably live with the $3.00/AF pumping fees and no increase. He was recommending that they go up one dollar to $4.00/AF. A resolution was required to raise it. He said he was recommending that they review the issue prior to July 1, 2005, and at that time if the litigation had been resolved they could roll the fee back or adjust it. If they were in litigation they may have to raise it another dollar before July 1st. He had also changed the Resolution in the packet to say that they would review it and roll it back at some point if it were possible by the first of July.

Director Schwabauer commented that he found it very distressing that they were in a situation that they would have to raise their pumping fees due to potential legal cost. He said he found it very sad that they were in a situation of a no choice mode.

Robert Eranio, Crestview Mutual Water Company, said he was in support of raising the fee to $4.00/AF and he was also incensed that they were looking at potential litigation as the driving force for it. He said he would also like for consideration to be looked at as to what will be done in the future to protect and insure that they were capturing all of their revenue and whether the revenue stream was legitimate and buttoned up in order to prevent future increases. Chapter 8 of the new Ordinance Code would be an ideal location to start taking a look at, whether it be mandating metering or testing of meters.

Chairman Maulhardt reminded everyone that the Board had gone through the metering discussion years ago and Ventura was one of the few counties that put on a metering ordinance. There had been a lot of debate about testing the meters at that time but they still did not have within the GMA Ordinance a policy of when to calibrate them, although the cities and large pumpers did. That was the concern that Mr. Eranio had discussed with him. Chairman Maulhardt thought that it was an appropriate discussion to have and

debate collectively and decide if there was a workable policy they could create. He asked Dr. Preston to put together an initial parameter of what a meter calibration package Ordinance might look like as a beginning of a discussion point, and put it on the agenda.

Chairman Maulhardt asked for a motion to adopt Resolution 2004-9, a resolution to increase the groundwater extraction charge to $4.00 per acre-foot for the first 6-months of 2005. Director Flynn so moved and a second came from Director Schwabauer. A role call found them all in favor.

INFORMATIONAL ITEMS

11. Weather Stations Report

No comments

12. Financial Status Report

No comments

13. Adjournment of Open Session

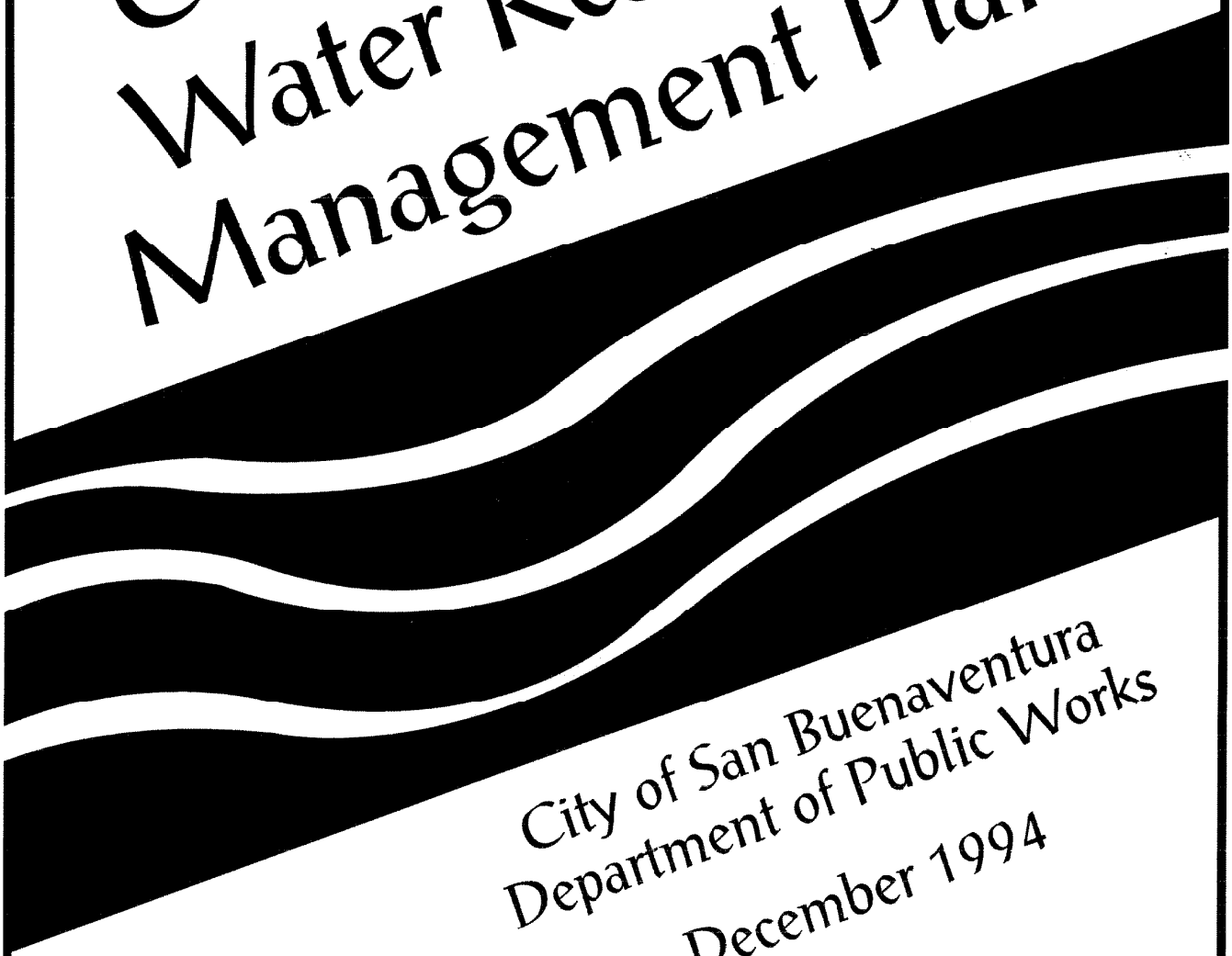
Chairman Maulhardt that they would adjourn to a closed session to deal with potential litigation issues.

The Open Session meeting was adjourned at 2:45, and the Board immediately retired to a smaller conference room to conduct the Closed Session.

APPENDIX B

City Comprehensive Water Resources Management Plan

Comprehensive Water Resources Management Plan



City of San Buenaventura
Department of Public Works

December 1994

City of San Buenaventura
Comprehensive Water Resources Management Plan

FINAL REPORT

Section I - Introduction/Purpose

The Comprehensive Water Resources Management Plan (CWRMP) is a compilation of water supply policy statements that provide guidance to develop and maintain a water system that meets the goals and objectives of the citizens of the City.

The CWRMP is intended to provide policy guidance while maintaining the Utilities Division's operational flexibility to make the day-to-day decisions necessary to operate the City's water system. The technical background to these policies is contained in the reports referenced in the attached annotated bibliography.

Section II - Policy Statements

A. General

A.1. The City has a variety of local surface and groundwater supplies. The goal of a reliable water supply is best met through conjunctive use of these local supplies.

A.2. Insofar as conjunctive use optimizes water resources, the Council supports efforts to cooperate with the City's neighbors to optimize regional water resources.

A.3. Acknowledging the City is best served by the input of a diversity of sources, the Council is receptive to questions and suggestions from individuals and a wide variety of technical and non-technical organizations.

A.4. The City's current overall planning document is the Comprehensive Plan Update to the Year 2010. The planning horizon established in the Comprehensive Plan is the year 2010. This horizon is appropriate for short-term facilities planning and financial planning. However, in recognition that most major water facilities have a relatively long life, a planning horizon of 50 years is appropriate for long-range planning of the water system.

B. Demand

B.1. Water is a natural resource that must be used wisely. The City is committed to the conservation and efficient use of this valuable resource and supports the implementation of Best Management Practices to meet this commitment. The City's current water planning criteria acknowledges this commitment by including a 12 percent reduction, from 1989 levels, in the per capita water consumption demand factors that are used to estimate future demands.

B.2. Conservation During a Drought: Additional mandatory water conservation beyond the 12% long-term water conservation is not planned as a regular measure to address historical drought cycles. The

City's ability to respond to unforeseen water shortages such as longer-than-historical droughts or catastrophic failures in water supply is best ensured by maintaining some demand-side adaptability. Since implementation of long-term efficiencies generally reduces customers' ability to adapt to water shortages, it is prudent to retain this adaptability for emergencies rather than regular drought cycles.

C. Supply

C.1. The City is fortunate to have several different water supply sources. These sources include: the Ventura River, three groundwater basins (Mound Basin, Oxnard Plain Basin, and Santa Paula Basin), and Lake Casitas. The City is committed to using its water supply sources in a "safe yield" manner. Safe yield is defined as the long-term average production that can be sustained by a water source. Actual production will be below that long-term average in some years and above in others.

The most efficient way to utilize these sources is to use them conjunctively. Conjunctive use is the practice of first utilizing surface supplies, which are lost to the ocean if not used when they are available, before groundwater supplies, which can be stored for use when the surface supplies are not plentiful. Therefore, the City will generally utilize its water supplies in the following order: Ventura River, Lake Casitas, and groundwater basins.

As an emergency buffer, a portion of the City's water in the Fox Canyon Groundwater Management Agency (Fox Canyon GMA) bank will not be considered available for normal use. Instead, it will be reserved for unforeseen water shortages such as a longer-than-historical droughts or catastrophic failures in water supply. For planning purposes, the emergency buffer will be calculated each year as five (5) percent of the total City-wide water demand for that year. This would be equal to approximately 1,000 acre-feet of water in 1995 and would increase gradually each year to about 1,300 acre-feet in year 2010.

C.2. Each of the City's water supply sources is unique. The following are the basic policies for the use of each source:

Ventura River

General: The City will operate its Ventura River production facilities in a manner which balances the needs of the water system and environmental concerns regarding the river.

Available annual yield: The yield will depend on local weather conditions. It is estimated that the City will be able to harvest between 700 and 11,000 acre-feet per year from the river.

Lake Casitas

General: Lake Casitas is owned and operated by the Casitas Municipal Water District (Casitas MWD). The majority of the water stored in the lake is diverted from the Ventura River. Approximately one-third of the City (the western end) is located within the Casitas MWD.

Available annual allocation: The allocation is currently established by Casitas MWD's Ordinance No. 92-7. The established allocation ranges from a maximum value equal to in-District demand, when the water level in the lake is relatively high (Allocation Program Stage 1), 7090 acre-feet per year in Stages 2 through 4, to a minimum of 4,960 acre-feet per year, when the Lake water level is low (Stage 5). The actual in-District use for calendar year 1993 was 7,247 acre-feet. The following are the City's estimated future in-District demand figures:

1995: 7,455 acre-feet per year
2000: 8,731 " " " "
2010: 9,613 " " " "

Mound Basin

General: The Mound Basin produces the poorest quality water of the City's three groundwater supplies.

City's planned long-term average annual production: 6,000 acre-feet.

For planning purposes, it is anticipated that annual production will vary from zero to 12,000 acre-feet.

Santa Paula Basin

General: The Santa Paula Basin produces the highest quality water of the City's groundwater supplies. The City is presently in litigation associated with the use of the Santa Paula Basin. The City will abide by any agreements that result from the litigation. Until then, the following planning criteria are being used:

City's average annual production: 3,000 acre-feet.

Oxnard Plain Basin

General: The City's wells in the Oxnard Plain Basin extract water from the Fox Canyon Aquifer. Some of the aquifers in the Oxnard Plain Basin are recognized as being in a state of overdraft. In an action intended to reverse the overdrafting of the aquifer, the Fox Canyon Groundwater Management Agency (Fox Canyon GMA) was formed in 1982. The Fox Canyon GMA has adopted several ordinances which regulate the use of the aquifer. The City will use the Oxnard Plain Basin in a manner that recognizes the City's ability to bank, or store, water in the Fox Canyon Aquifer.

Available annual allocation: The allocation is established by Ordinance No. 5 of the Fox Canyon GMA. The established allocations are as follows:

1992: 5,186 acre-feet per year
1995: 4,913 " " " "
2000: 4,640 " " " "
2005: 4,367 " " " "
2010 and after: 4,094 " "

C.3. Future Supplemental Water Supply: The City is going to need a supplemental water supply sometime in the future. The recent thorough evaluation of projected water supplies, demands, and proposed water system improvements in the six-year capital improvement program indicates that supplemental water will not be needed for the foreseeable future (15+ years) even if the City experiences severe drought conditions. Therefore, a supplemental supply developed now would not be utilized for many years. A decision on whether desalinated seawater, State Water Project water, or both will be part of the City's future water supply is best decided in the future when the need for a supplemental water supply is imminent. There is no technical benefit to making this decision at this time since future circumstances may lead to a different decision than one made today based on current circumstances.

C.4. Disposition of the City's State Water Project (SWP) Entitlement: At this time, the potential future benefit of using the SWP entitlement for the City's advantage outweighs the cost and risk of abandoning the City's investment in this option. The decision concerning the ultimate disposition of the City's State Water Project entitlement would be more appropriately made when the need for a supplemental water supply is imminent. Since the City will not need a supplemental water supply for at least 15 years, using the entitlement on a short-term basis to either improve the City's water supply conditions or minimize the financial impact of keeping the entitlement should be pursued. Beneficial uses or alternatives for the City's SWP entitlement may be found prior to the decision on how this source is or is not incorporated into the City's long-term supplemental water supply.

D. Quality

D.1. The water quality goals established in the Comprehensive Plan are "a water quality level of 800 milligrams per liter of total dissolved solids (TDS) in the East End, with a maximum water quality level of 1,000 milligrams per liter."

D.2. Additional Capital Projects to Improve Water Quality: While the existing capital improvement program is focused on improving the City's available water supply, this program will also partially improve water quality in the process. Additional capital projects that have the sole purpose of improving the quality of delivered water will not be pursued at this time. Further improvement in water quality will be considered in conjunction with the development of a long-term supplemental water supply source.

E. Facilities

E.1. The City's water supply and distribution system provides an essential service necessary for the health and safety of residents. The system must be able to function during emergencies and natural disasters. Provisions for emergency power and seismic resistance will be implemented, as soon as possible, to maintain a minimum level of water supply for basic sanitary and fire fighting needs during emergencies.

E.2. Inter-Connection with Neighboring Water Systems: Except for the connection with the Casitas Municipal Water District, the City's water system presently does not have inter-connections with neighboring water systems. Benefits of inter-connections include: the ability of the City and its neighbors to provide mutual aid during emergencies; the potential to expand the City's intended practice of conjunctive use of its water supplies to include the region's water supplies; and the potential for the City, in cooperation with Calleguas and Oxnard, to store water in the Las Posas Groundwater Basin for the City's use in emergencies. Given these benefits, the City should pursue cost effective inter-connections with neighboring water systems.

E.3. As an essential component of the City's total infrastructure, the water system must be reliable. In acknowledgment of the fact that unforeseen equipment failures will occur within the water supply and distribution system, redundant facilities will be included in the overall water system.

E.4. Upgrades to the water distribution system will be made by the year 2000 to remedy deficiencies in the system's ability to make maximum use of the City's surface water supplies and to meet fire fighting needs.

E.5. The City's water supply and distribution system constitutes a significant infrastructure capital investment. An ongoing routine preventative maintenance program will be implemented to maintain this investment in a reliable condition.

F. Monitoring

F.1. Water supply planning must be dynamic to address the ever-changing conditions of weather, level of supplies, demand, and patterns of use within the City. In acknowledgment of this, an annual review of water supplies and demand projections will be made to determine which actions should be implemented to meet the City's water needs.

G. Supplemental Supply Implementation

G.1. The recent thorough evaluation of projected water supplies and demands concluded that the City will not need a supplemental water supply for at least 15 years if the current Capital Improvement Program is implemented. It is anticipated that approximately ten (10) years will be required to fully implement a supplemental water supply project. This would accommodate Council decision making and public response, a

feasibility study phase, completion of construction, and startup of the facility.

The City should have a program in place which can provide advance warning and a decision making process for the need of a supplemental water supply, whether the need be for drought-proofing or for long-term base-loaded supply. The program should include an annual review of critical water supply conditions with a biennial report provided to the Council in the Fall of even numbered years. A ten year projection should review critical water supply conditions including the production from the Ventura River, storage in Lake Casitas, the balance in the Fox Canyon GMA groundwater bank, the condition of the Mound and Santa Paula Basins, and the water demand in the City. Based on that projection, the Council will be asked to certify whether the then-existing water supply and planned improvements are sufficient to satisfy the City's water needs for the ensuing ten years.

Section III - Appendices

A. Background to Selected Policy Statements

B. Annotated Bibliography

City of San Buenaventura
Comprehensive Water Resources Management Plan
Appendix A

Background to Selected Policy Statements

The Council Utilities Committee requested a short written discussion and alternatives on selected policy issues to facilitate its deliberations. The background sheets with the Committee's recommendations are included in this section.

B.2. Conservation During A Drought: Is it appropriate to plan for additional conservation during a drought? If so, what level of conservation should be included in the City's drought contingency planning?

C.3. Supplemental Supply Alternatives: What supplemental supply or supplies (seawater desalination and/or State Water Project (SWP)) should continue to be pursued by the City?

C.4. Disposition of the City's State Water Project Entitlement: What should the City do with its State Water Project (SWP) entitlement in the short term? What should the City do with it in the long term?

D.2. Additional Capital Projects to Improve Water Quality: Should additional capital projects be added solely to improve water quality?

E.2. Inter-Connection With Neighboring Water Systems: Should the City pursue inter-connections with neighboring water systems?

G.1. Supplemental Water Supply Triggers: What conditions should trigger the implementation of the City's supplemental water supply project?

B.2. CONSERVATION DURING A DROUGHT

Policy Issue: Is it appropriate to plan for additional conservation during a drought? If so, what level of conservation should be included in the City's drought contingency planning?

Background: During the recent drought, water conservation played a significant role in balancing supply and demand. Demand was reduced from 1989 pre-drought levels as follows: 20% in 1990, 39% in 1991, 31% in 1992, and 27% in 1993. These conservation levels were achieved by both short-term changes in water use patterns and long-term changes such as plumbing fixture upgrades and more water-efficient landscape and irrigation. The City's water studies of 1991 and 1992 included a 12% long-term reduction in projecting future demands. Based on evaluations performed in connection with the 1993 Desal Project Update, it is estimated that 10% long-term conservation has been achieved and that a 12% total demand reduction will be in place by the year 2010.

Currently, water supply is being planned to meet projected water demands regardless of weather conditions. An alternative would be to include additional water conservation, in excess of the long-term water conservation already included in demand projections, to reduce water demands during droughts. This alternative would delay implementation, or reduce the size, of a supplemental water supply required to meet future water demands. Planning to rely on demand reductions during drought cycles should be distinguished from contingency plans to reduce demand during emergency water supply shortages or longer-than-historical drought cycles.

Alternatives:

1. Do not plan on additional conservation levels beyond the 12% long-term conservation already included in future demand projections.

2. Plan on additional conservation during normal drought cycles in addition to the 12% planned long-term conservation up to an additional 27%, but not to exceed the total reduction of 39% achieved under the water shortage emergency during 1991.

3. Plan on additional conservation, in addition to the 12% planned long-term conservation, beyond the levels reached during the water shortage emergency.

Committee Recommendation: Alternative 1: Do not plan on additional conservation beyond the 12% long-term conservation goal. The City's ability to respond to unforeseen water shortages such as longer-than-historical droughts or catastrophic failures in water supply is best ensured by maintaining some demand side adaptability. Since implementation of long-term efficiencies generally reduces customers' ability to adapt to water shortages, it seems prudent to retain this adaptability for emergencies rather than regular drought cycles.

C.3. SUPPLEMENTAL SUPPLY ALTERNATIVES

Policy Issue: What supplemental supply or supplies (seawater desalination and/or State Water Project (SWP)) should continue to be pursued by the City?

Background: The City is going to need a supplemental water supply sometime in the future. The recent thorough evaluation of projected water supplies, demands, and proposed water system improvements in the six-year capital improvement program indicates that supplemental water will not be needed for the foreseeable future (15+ years) even if the City experiences severe drought conditions. Therefore, a supplemental supply developed now would not be utilized for many years.

The City should have a well developed program for monitoring its water supplies and demands to anticipate when the supplemental supply will be needed (refer to Policy Issue G.1. - Supplemental Water Supply Triggers).

Alternatives:

1. Decide now to pursue seawater desalination sometime in the future when the need for a supplemental water supply is imminent.

2. Decide now to pursue the State Water Project sometime in the future when the need for a supplemental water supply is imminent.

3. Decide now to pursue both seawater desalination and the State Water Project sometime in the future when the need for a supplemental water supply is imminent.

4. Decide sometime in the future, when the need for a supplemental water supply is imminent, which supplemental supply or supplies to pursue.

Committee Recommendation: Alternative 4: Decide in the future, when the need for a supplemental water supply is imminent, which supplemental supply or supplies to pursue. There is no technical benefit to making this decision at this time. Future circumstances may lead to a different decision than one made today based on current circumstances.

C.4. DISPOSITION OF THE CITY'S STATE WATER PROJECT ENTITLEMENT

Policy Issue: What should the City do with its State Water Project (SWP) entitlement in the short term? What should the City do with it in the long term?

Background: The City's State Water Project entitlement is established through a series of agreements. The State Department of Water Resources granted the original entitlement to the County of Ventura Flood Control District. A subsequent agreement assigned the entitlement to the Casitas Municipal Water District. The City and the Casitas have an agreement which assigned the City 10,000 acre feet per year of the County's 20,000 acre feet total entitlement. Under these agreements, the City pays its pro rata share of the costs of the SWP capital facilities necessary to bring State Water to Castaic Lake. This obligation originated in 1963 and extends to the year 2038.

Based on the City Attorney's review of the City's entitlement, the City cannot unilaterally end its involvement in the State Water Project's financial obligations and entitlement without great risk. There are alternatives available to the City. Under the terms of the local agreements, any assignment or transfer of the City's entitlement would probably involve the other local parties as well as the State Department of Water Resources. Further, the City has agreed not to seek such a transfer if any financially able entity within Ventura County is willing and able to take the water under terms and conditions fair to the City. These alternatives require the cooperation and interest of other parties. State-wide, other agencies have discussed temporary transfers or permanent relinquishments, sales or transfers of SWP entitlements; however, no clear precedent exists.

Alternatives:

1. Solicit other Ventura County agencies to accept the City's financial obligations for its State Water Project entitlement. Previous discussions suggest it is unlikely that the City would recover its previous investment in the entitlement.

2. Maintain the City's SWP entitlement pending future decisions on a supplemental water supply. At this time, the potential future benefit of using the SWP entitlement for the City's advantage outweighs the cost and risk of abandoning the City's investment in this option. The decision concerning the ultimate disposition of the City's State Water Project entitlement would be more appropriately made when the need for a supplemental water supply is imminent. Since the City will not need a supplemental water supply for at least 15 years, we should pursue ways of using the entitlement on a short-term basis to either improve the City's water supply conditions or minimize the financial impact of keeping the entitlement. Beneficial uses or alternatives for the City's SWP entitlement may be found prior to the decision on how this source is or is not incorporated into the City's long-term supplemental water supply.

Committee Recommendation: Alternative 2: Maintain the City's entitlement.

D.2. ADDITIONAL CAPITAL PROJECTS TO IMPROVE WATER QUALITY

Policy Issue: Should additional capital projects be added solely to improve water quality?

Background: The primary purpose of the planned facilities in the current 6-Year Capital Improvement Program (CIP) is to improve the reliability of the water system through conjunctive use of the City's existing water supplies. Future operations will maximize the use of the City's surface supplies from the Ventura River and Lake Casitas. Since the City's highest quality water comes from these sources, the new facilities will also improve water quality.

The attached graphs and map provide an indication of the water quality that the City customers experienced in 1989 and 1993, and the quality that is projected for Year 2000 if the improvements in the CIP are implemented. The graphs indicate the following:

Quality Zone A (West): (1) customers have received in the past, and will receive in the future, water that meets the quality goals essentially 100 percent of the time and (2) the average level of total dissolved solids (TDS) is projected to remain at approximately 600 mg/l in the Year 2000 as a result of the CIP projects.

Quality Zone B (Central): (1) customers have received in the past, and will receive in the future, water that meets the quality goals most of the time and (2) the average TDS is projected to drop from 651 mg/l in 1993 to approximately 500 mg/l in the Year 2000 as a result of the CIP projects.

Quality Zone C (East): (1) customers have rarely received in the past, and will rarely receive in the future, water that meets the goals, (2) the average TDS is projected to drop from 1038 mg/l in 1993 to approximately 900 mg/l in the Year 2000 as a result of the CIP projects.

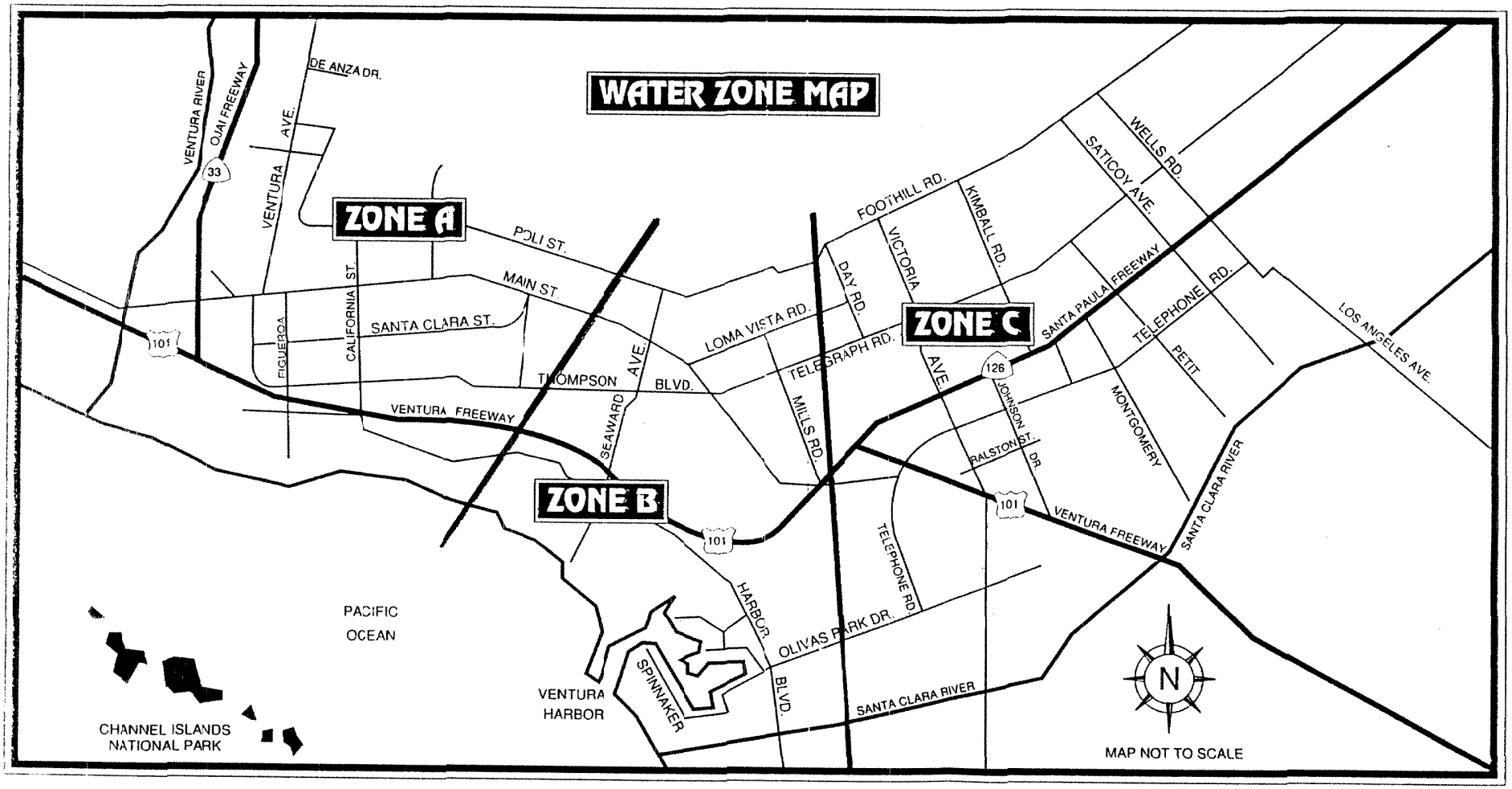
Alternatives:

1. Do not pursue additional capital projects that have the sole purpose of improving the quality of the water delivered. Concentrate the City's limited human and financial resources on improving reliability of the water system and the quantity of available water supplies. It is recognized that the planned water supply enhancing improvements will also provide some improvement to the City's water quality. When a supplemental water source (seawater desalination or State Water importation) is added, the City's water quality could be further improved.

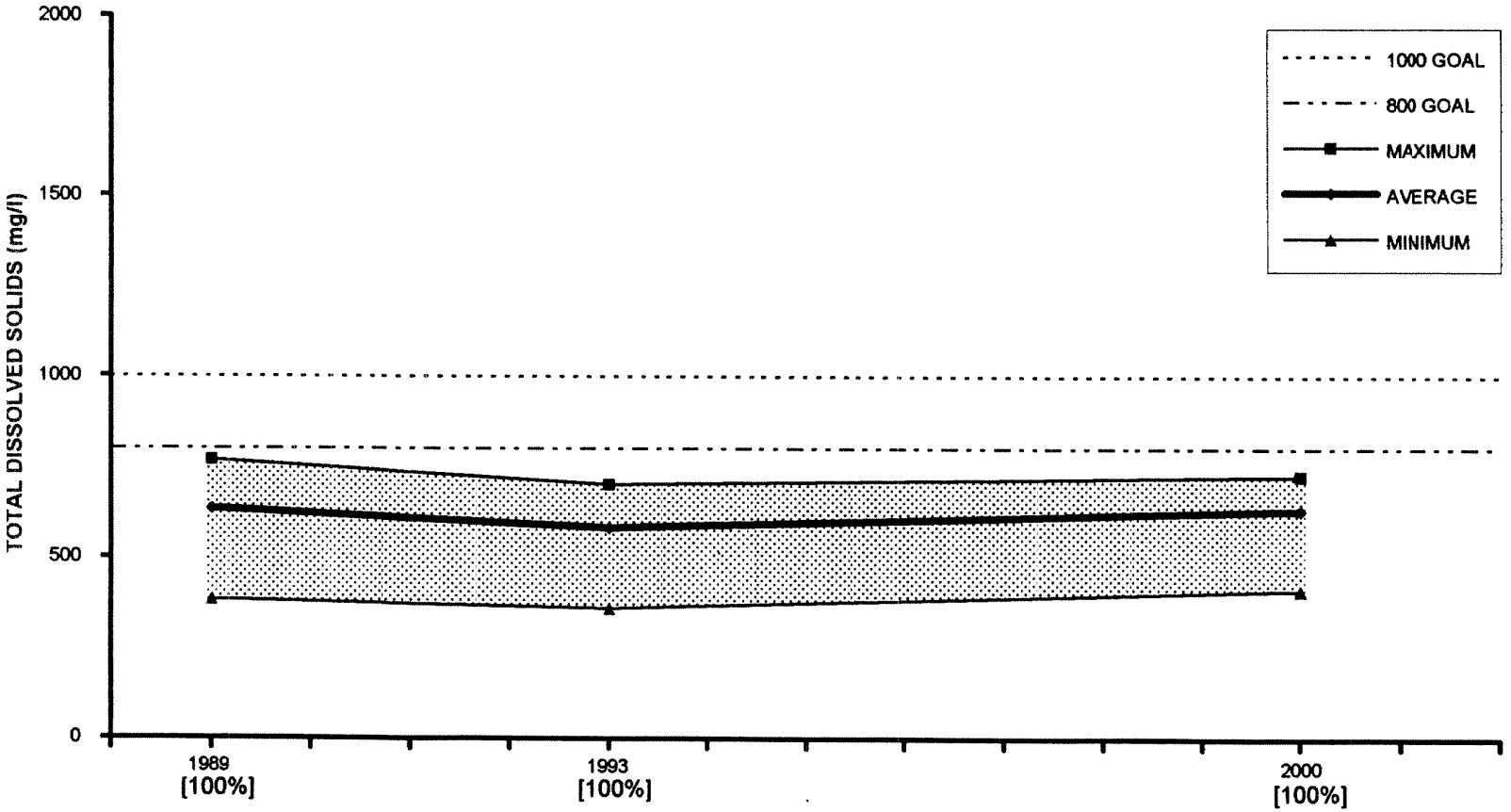
2. Pursue a limited number of additional capital projects that will improve the City's water quality but not meet the City's water quality goals 100 percent of the time.

3. Pursue the additional capital projects necessary to meet the City's water quality goals 100 percent of the time. The total capital cost of these projects is estimated to be approximately $38 million (in December 1993 dollars).

Committee Recommendation: Do not pursue additional capital projects that have the sole purpose of improving the quality of water delivered. Wait until the development of the long-term supplemental water supply source to evaluate options to further improve the City's water quality.

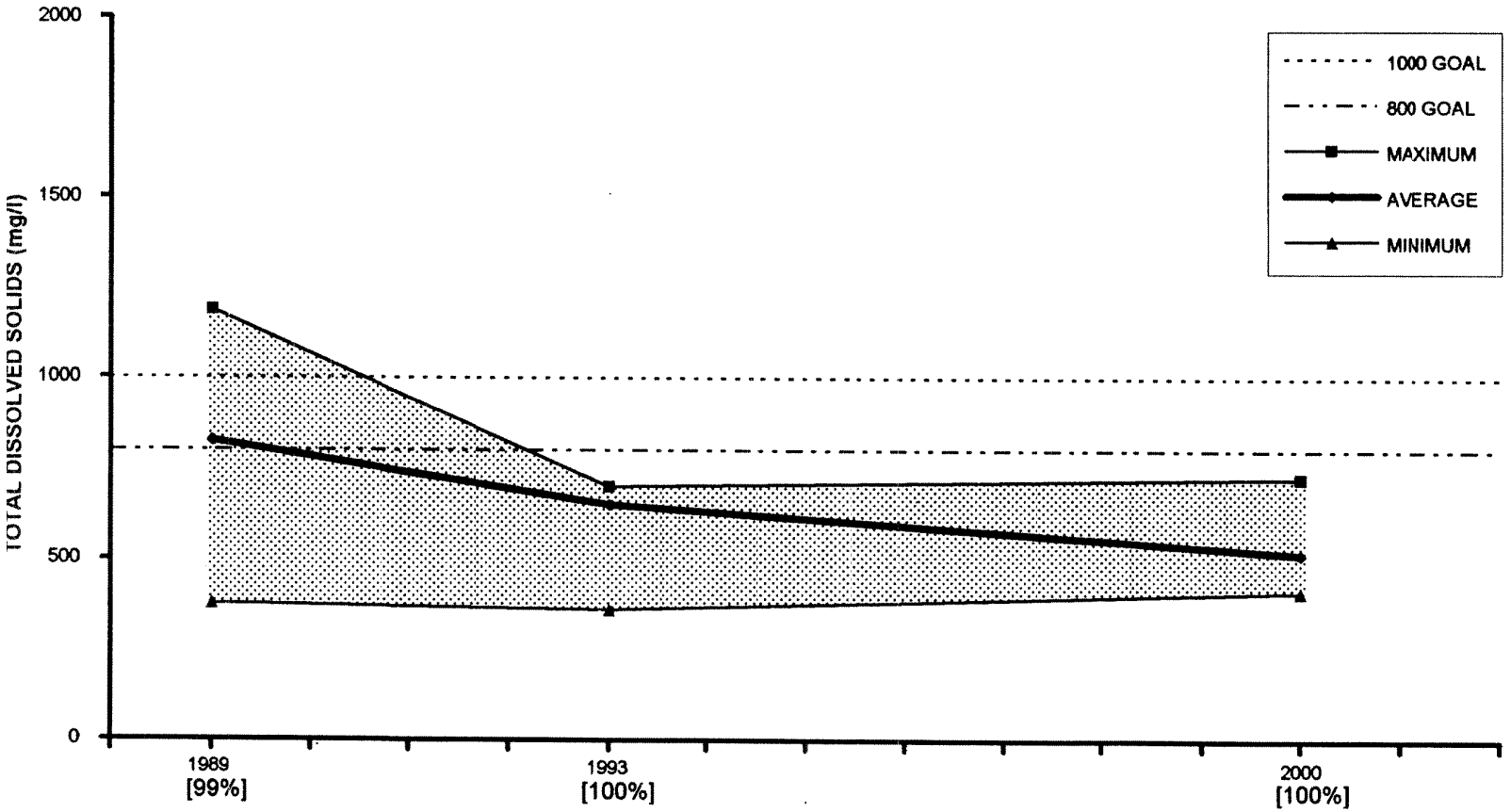

WATER ZONE MAP
ZONE A
ZONE B
ZONE C
VENTURA RIVER
OJAI FREEWAY
33
DE ANZA DR.
VENTURA AVE.
POLI ST.
MAIN ST.
SANTA CLARA ST.
CALIFORNIA ST.
FIGUEROA
101
VENTURA FREEWAY
THOMPSON BLVD.
SEAWARD AVE.
LOMA VISTA RD.
TELEGRAPH RD.
MILLS RD.
DAY RD.
FOOTHILL RD.
VICTORIA AVE.
KIMBALL RD.
SATICOY AVE.
WELLS RD.
SANTA PAULA FREEWAY
126
JOHNSON DR.
RALSTON ST.
MONTGOMERY
PETIT
TELEPHONE RD.
LOS ANGELES AVE.
SANTA CLARA RIVER
HARBOR BLVD.
OLIVAS PARK DR.
SPINNAKER
VENTURA HARBOR
PACIFIC OCEAN
CHANNEL ISLANDS NATIONAL PARK
N
MAP NOT TO SCALE

WESTSIDE QUALITY ZONE A
SUMMARY OF HISTORIC AND PROJECTED WATER QUALITY
CITY OF SAN BUENAVENTURA



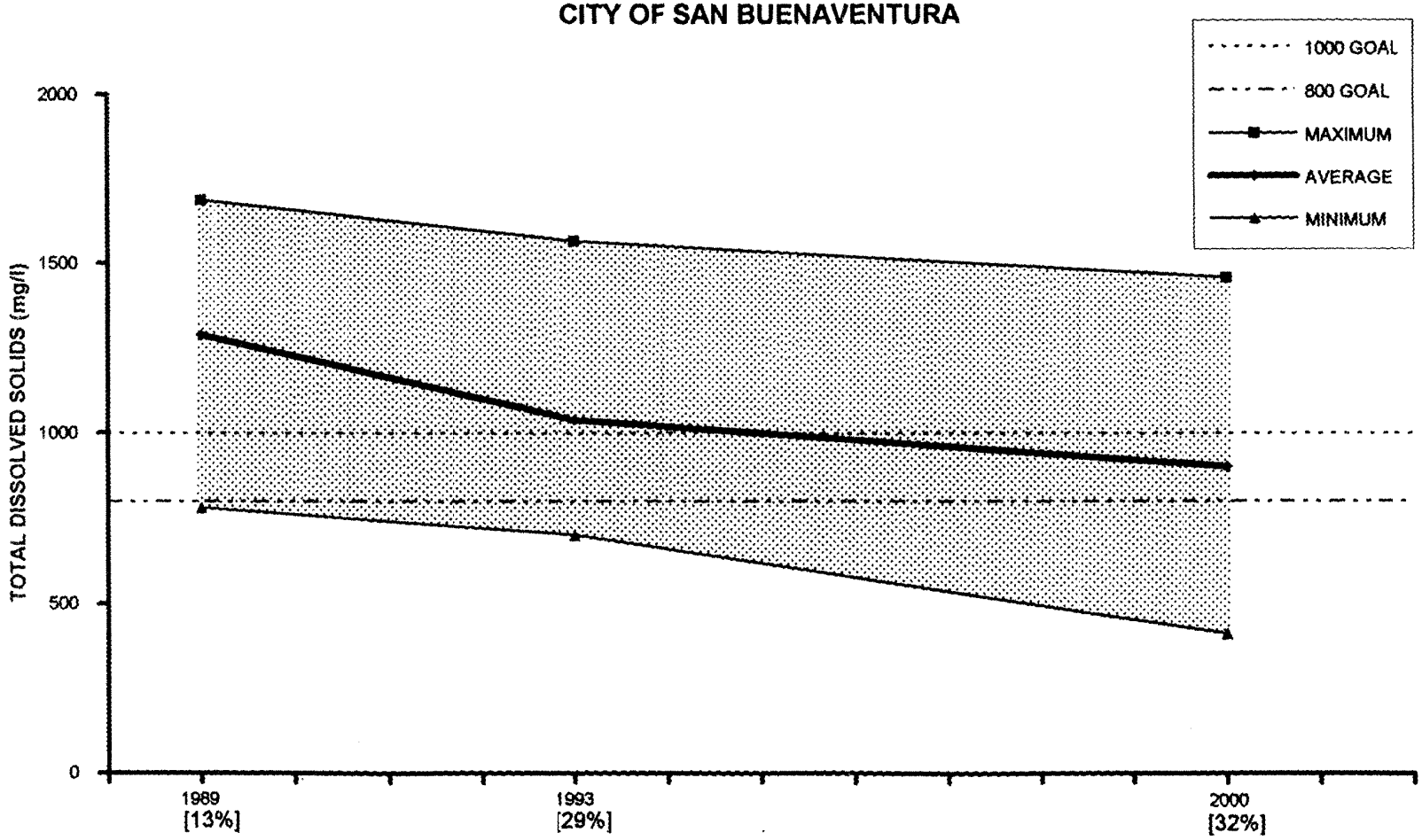
NOTE: BRACKETED NUMBERS INDICATE PERCENT OF WATER DELIVERED EACH YEAR MEETING WATER QUALITY GOALS.

CENTRAL QUALITY ZONE B
SUMMARY OF HISTORIC AND PROJECTED WATER QUALITY
CITY OF SAN BUENAVENTURA



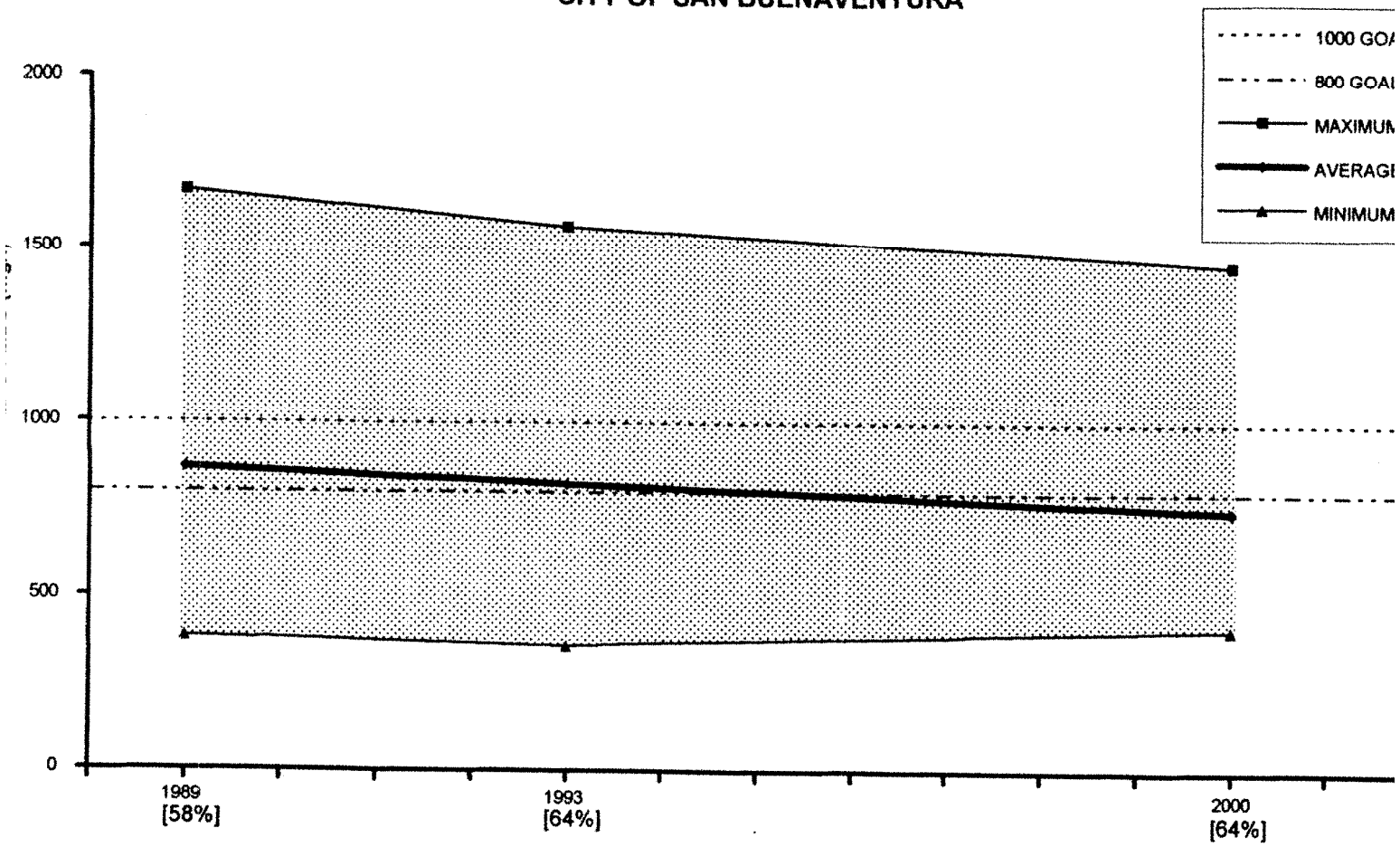
NOTE: BRACKETED NUMBERS INDICATE PERCENT OF WATER DELIVERED EACH YEAR MEETING WATER QUALITY GOALS.

EASTSIDE QUALITY ZONE C
SUMMARY OF HISTORIC AND PROJECTED WATER QUALITY
CITY OF SAN BUENAVENTURA



NOTE: BRACKETED NUMBERS INDICATE PERCENT OF WATER DELIVERED EACH YEAR MEETING WATER QUALITY GOALS.

CITY-WIDE
SUMMARY OF HISTORIC AND PROJECTED WATER QUALITY
CITY OF SAN BUENAVENTURA



NOTE: BRACKETED NUMBERS INDICATE PERCENT OF WATER DELIVERED EACH YEAR MEETING WATER QUALITY GOALS.

E.2. INTER-CONNECTION WITH NEIGHBORING WATER SYSTEMS

Policy Issue: Should the City pursue inter-connections with neighboring water systems?

Background: Except for the connection with the Casitas Municipal Water District, the City's water system presently does not have inter-connections with neighboring water systems. Connections with the City of Oxnard (Oxnard), Calleguas Municipal Water District (Calleguas), United Water Conservation District, and even the City of Santa Paula have been discussed in the past. The potential benefits of inter-connections were demonstrated in 1991, when the City was inter-connected with Oxnard as part of a regional cooperative effort to deliver water to Santa Barbara County during the drought.

The benefits of inter-connections include: the ability of the City and its neighbors to provide mutual aid during emergencies; the potential to expand the City's intended practice of conjunctive use of its water supplies to include the region's water supplies; and the potential for the City, in cooperation with Calleguas and Oxnard, to store water in the Las Posas Groundwater Basin for the City's use in emergencies.

The drawbacks of inter-connections include: the allocation of human and fiscal resources necessary to design and construct the physical facilities and to negotiate the inter-agency agreements required; and operation and maintenance costs associated with the physical facilities.

Alternatives:

1. Do not pursue inter-connections with neighbors. Concentrate limited human and financial resources on improving the reliability of an independent water system.

2. Pursue inter-connections with neighboring water systems. This will complement the City's efforts to improve the reliability of its independent water system.

Committee Recommendation: Pursue cost effective inter-connections with neighboring water systems. These inter-connections could be extremely beneficial to the City, and its neighbors, in emergency situations.

G.1. SUPPLEMENTAL WATER SUPPLY TRIGGERS

Policy Issue: What conditions should trigger the implementation of the City's supplemental water supply project?

Background: The recent thorough evaluation of projected water supplies and demands concluded that the City will not need a supplemental water supply for at least 15 years if the current Capital Improvement Program is implemented. It is anticipated that approximately ten (10) years will be required to fully implement a supplemental water supply project. This would accommodate Council decision making and public response, a feasibility study phase, completion of construction, and startup of the facility. The City should have a program in place which can provide advance warning and a decision making process for the need of a supplemental water supply, whether the need be for drought-proofing or for long-term base-loaded supply.

Committee Recommendation: Establish a program to include regular monitoring and an annual staff review of critical water supply conditions. A biennial report shall be provided to the Council in the Fall of even numbered years. A ten year projection should review critical water supply conditions including the production from the Ventura River, storage in Lake Casitas, the balance in the Fox Canyon GMA groundwater bank, the condition of the Mound and Santa Paula Basins, and the water demand in the City. Based on that biennial report, the Council will decide whether or not to re-activate the decision making process for implementation of a supplemental water supply. Based on that projection, the Council will be asked to certify whether the then-existing water supply and planned improvements are sufficient to satisfy the City's water needs for the ensuing ten years.

City of San Buenaventura
Comprehensive Water Resources Management Plan
Appendix B

Annotated Bibliography

The following bibliography is organized chronologically to show the development of the most recent studies related to the City's water supply. Since this body of knowledge has been built up over time, findings from earlier studies have sometimes been refined in later studies.

1. "Comprehensive Plan Update to the Year 2010," and "Final Master E.I.R.," City of San Buenaventura Department of Community Development, Planning Division, August 28, 1989 and April 6, 1989 respectively.

   The Comprehensive Plan Update documents the adopted policies of the City regarding resources, land use, circulation, housing, safety, noise, park and recreation, economic development, and community design. The policies relating to water are included in the discussion of the City's resources and are listed on pages II-16 and II-17. The Final Master E.I.R includes a description of the City's water supply, Section 6.19 on pages 6-557 through 6-599.

2. "A Resolution of the City Council of the City of San Buenaventura Committing to a Course of Action on Water Planning and Implementation," Resolution No. 90-79, August 1990.

   At the height of the recent drought, it became necessary for the City to implement a mandatory water conservation program to maximize the use of the City's water supplies, which were not adequate to meet the City's needs. The City Council also adopted Resolution No. 90-79 which committed the City to taking a "fresh look" at the City's water needs and supplies. Many of the following reports listed in this Annotated Bibliography were prepared as a result of this resolution. The Comprehensive Water Resources Management Plan is one of the products resulting from Resolution No. 90-79.

3. "1990 Urban Water Management Plan for the City of San Buenaventura," City Water Division and Boyle Engineering Corporation, October 1991.

   The Urban Water Management Plan is a document the City is required to prepare every five years to comply with the California Urban Water Management Planning Act, a California statute. The purpose of the plan was to evaluate the City's water conservation program, and to recommend a course of action for water conservation for the next five years and beyond.

   The plan provides a good overview of the 1990 status of the City's water system and its water conservation program. It identifies an impending water supply deficiency and references the studies underway at that time to address that deficiency. It also identifies the potential impacts of various additional conservation measures that the City was considering for implementation.

4. "Casitas Municipal Water District, City of San Buenaventura, United Water Conservation District, Alternatives Evaluation Study for a Joint Agencies Water Supply Project," Boyle Engineering Corporation, November 1991.

This report documents alternative concepts for a joint project that would supplement the water supplies of Casitas, Ventura, and five of United's member agencies (Fillmore, Santa Paula, Port Hueneme, Channel Islands Beach CSD, and the County of Ventura representing Piru). The alternatives presented in the report include the importation of State Water Project water (from either Pyramid Lake or Castaic Lake) and desalination of seawater. Relative costs, advantages, and disadvantages of each alternative are presented.

5. "City of San Buenaventura City Council, Comparison of Water System Alternatives," Boyle Engineering Corporation, June 22, 1992.

This comparison was prepared to facilitate the deliberations of the City Council and the general public in deciding on a course of action for a new water supply. Based on initial findings from the following three reports in this bibliography, the declared water shortage emergency by the Casitas Municipal Water Disctrict, falling groundwater levels, and the prospect of a continuation of the drought; the need for a supplemental water supply was imminent. This report was prepared to provide factual background information on supplemental supply alternatives to the Council and the public prior to the November 1992 vote on Measure "O."

Measure "O" was an advisory ballot measure regarding whether seawater desalination or State Water Project water should be developed as an additional water supply for the City. Voters favored seawater desalination by 55% of the votes cast.

The alternatives compared in the study included: importing State Water Project water as part of a joint project with Casitas MWD and United WCD, importing State Water Project water as a City "stand-alone" project, and constructing a City seawater desalination facility. The comparison explains the basic components of each alternative and discusses the basic advantages and disadvantages of each.

6. "Master Plan for Reclaimed Water System," Black & Veatch, August 1992.

This is the first document prepared as a result of Resolution No. 90-79 (see listing No. 2 above). It describes the City's water reclamation program and identified the potential for its expansion. The City reclaims sewage wastewater and distributes the reclaimed water produced.

7. "Evaluation of Long-Term Alternative Water Sources," Montgomery Watson, Inc., June 1993.

This is the second document prepared as a result of Resolution No. 90-79 (see listing No. 2 above). The purpose of the evaluation was to identify and assess all potentially viable sources of long-term water supply for the City. The document includes an assessment of the following alternatives for increasing local supplies: additional groundwater yield, additional Ventura River yield, additional Lake Casitas yield, reclaimed wastewater, Sespe Creek water, agricultural runoff, storm water runoff, acquisition of water companies, purchase of water from other entities, and desalinated seawater. The following alternatives for imported water supplies were evaluated: State Water Project water, water from Canada via tanker ship, and water from icebergs.

8. "Water System Operational Evaluation and Improvement Program," Boyle Engineering Corporation, June 1993.

This is the third document prepared as a result of Resolution No. 90-79 (see listing No. 2 above). The evaluation made use of the data evaluated and conclusions reached by the two other water studies (see listing Nos. 6 and 7 above), and provides a plan for implementing the identified alternative sources and other system improvements needed to meet the water needs and goals of the City. The document provides a detailed analysis of the City's existing water system in relation to present and future system needs. It documents the evaluation of the City's water quantity and quality needs, supply and storage capacity needs, distribution system needs, reliability needs, and the need for operational flexibility.

9. "City of Ventura, Proposed Desalination Project Feasibility Study, Onshore Production and Disposal Options for Saline Groundwater, Volume I - Pierpont Elementary School Site, and Volume II - Promenade Park Site," Staal, Gardner & Dunne, Inc., January 1994.

   This study documents the field investigations that were conducted and conclusions reached regarding the City's ability to pump seawater from the shallow coastal aquifers as a source water for a seawater desalination facility. The study also documents the conclusions reached regarding the potential for discharging brine, that would be a by-product of a seawater desalination facility, under the surface of the sand in the surf zone.

   See "Ventura Desal Project Summary Report and Recommendations Based on 1993 Activities" (see listing No. 12 below) for a summary of this report.

10. "Regulatory Reconnaissance Report for the Ventura Desalination Project," Woodward-Clyde Consultants, April 1994.

    As part of the initial phase of the Ventura Desal Project, the City's project team met with each of the potentially interested regulatory agencies and provided them a briefing on what the City's project was envisioned to include. Each agency had an opportunity to express concerns and suggest ways to investigate the validity of those concerns. The report summarizes the briefing meetings and provides copies of the permit application packets that will have to be utilized for the development of a seawater desalination project.

    See "Ventura Desal Project Summary Report and Recommendations Based on 1993 Activities" (see listing No. 12 below) for a summary of this report.

11. "Evaluation of Existing 30-inch Outfall, Phase 1, Final Report, Ventura Desalination Project," Oceaneering Technologies, Inc., June 3, 1994.

    The City owns an abandoned outfall pipeline that was once used to discharge treated municipal wastewater to a location approximately one-half mile offshore near the Ventura County Fairgrounds. This report documents the visual observations made and the conclusions reached regarding the condition of the pipeline.

    See "Ventura Desal Project Summary Report and Recommendations Based on 1993 Activities" (see listing No. 12 below) for a summary of this report.

12. "Ventura Desal Project Summary Report and Recommendations Based on 1993 Activities," Boyle Engineering Corporation, February 1, 1994.

This report provides a summary, in layman's terms, of the technical studies and evaluations completed in 1993 regarding the City's seawater desalination project. It documents the consultant's recommendations regarding how the City should proceed with its seawater desalination project.

The report also provides an update on water supply and demand conditions which affect the City's short- and long-term water planning efforts. The presented material supersedes some of the supply and demand data presented in previous reports. The major conclusion reached was that a supplemental water supply will not be needed for the foreseeable (15+ years) future, if the City properly manages its current supplies, including the addition of major capital projects, to make the best use of local water supplies. This would meet the City's water supply needs at a lower cost than implementing a supplemental seawater desalination source.

[JHG et al: MSW CWRMP.doc]

APPENDIX C

City Water Consumer Confidence Report for 2005

City of Ventura Water Consumer Confidence Report 2005

The City of Ventura welcomes this opportunity to provide you with water quality information. This Water Consumer Confidence Report was prepared in compliance with regulatory requirements utilizing data gathered in 2004. Ventura's Water Division works to ensure that Ventura's water meets or exceeds state and federal standards.

Ventura's Water Sources

The City has three local water sources, each accounts for approximately one third of the entire water supply. A portion of Ventura's water is from the Ventura River and is pumped from four shallow wells. Water is also distributed from Lake Casitas, which is operated and treated by the Casitas Municipal Water District (CMWD). Additional water is pumped from groundwater wells located in the City's east side. In order to produce, treat and distribute safe water to our customers, the City owns and operates 11 wells, three water treatment plants, 23 booster pump stations, 31 water storage reservoirs and more than 500 miles of distribution pipelines.

Water Treatment

All of the City's water receives treatment. Water from the Ventura River is treated by a method referred to as Conventional Surface Water Treatment. This process involves coagulation (chemical addition), flocculation (gentle agitation), sedimentation (settling particles), filtration, and disinfection with chloramines. The groundwater sources are treated to remove iron, manganese and turbidity. Additional treatment is provided at each plant to help prevent the corrosion of plumbing in your home. CMWD treats the water from Lake Casitas with direct filtration and chloramines for disinfection prior to delivery into the City's system.

The City uses chloramines for disinfection. Chloramines are chemicals that contain chlorine and ammonia. Chloramines were selected as the preferred disinfectant because of their ability to provide disinfection over an extended period of time, and for better taste and fewer odors compared to using chlorine alone. Chloramines have been proven to help treat water to lower levels of trihalomethanes (TTHMs) and haloacetic acids (HAAs), which are potentially harmful byproducts of the chlorine disinfection process.

Although Chloramines are desirable in protecting the water distribution system, their use requires additional precautions for some water uses. If a member of your household requires dialysis, you should contact your physician or dialysis service provider to assure proper protective equipment is used. If you use tap water for fish or other aquatic animals that use gills for breathing, you need to test and be sure the chloramines are completely removed before use. Setting water in an open container for 24 hours prior to use will **not** remove all chloramines in the water. Your local pet store can provide information and products for the proper removal of chloramines.

Water Quality Monitoring

Ventura owns and operates a full-scale, state-certified laboratory to monitor water quality. State-certified operators run Ventura's treatment plants. The plants have instrumentation that continuously monitors specific water constituents to ensure that the water is of high quality.

In addition to the water quality constituents listed on the Water Quality Summary Table (see back page), the City sampled in 2003 for many other regulated, and 12 federal and eight state unregulated contaminants all of which were below detection limits, except for Boron and Vanadium.

Water Quality Studies

The City, like other water purveyors in the country, completed a federally mandated review of its water system security. This review evaluated the water facilities and prioritized security measures that can help minimize the risk of damage or contamination. The City already has and will continue to take steps to improve the protection of City water facilities.

Since 2002, the City has monitored water quality along the Ventura River and San Antonio Creek at 15 sites for Cryptosporidium, Giardia, Bacteria, Nutrients, Bromide, Total Organic Carbon, Chloride and Conductivity. The City will update a Sanitary Survey of the Ventura River Lower Watershed in 2006.

A separate Drinking Water Source Assessment for the City's water supplies was completed in January 2002. No contaminants have been detected in the water supply from such surrounding sources as gas stations, agricultural drainage, dry cleaners, urban run off, sewer systems, metal plating/finishing and repair shops.

As a water supplier, the City must complete an evaluation of its drinking water supply with respect to Public Health Goals (PHG) every three years. The goals are not mandatory limits and are based solely on public health risk factors. The City completed an evaluation in 2004, which determined that six chemicals exceeded a PHG. These were lead, copper, uranium, gross alpha & beta particles, and radium 226. Copper and lead can be found in water as a result of the corrosion of plumbing fixtures used in most homes. The City has conducted tests to optimize its treatment with corrosion inhibitors in an effort to further reduce lead and copper levels. High levels of lead can result in kidney problems or high blood pressure, and delays in physical and mental development in children. High levels of copper are known to cause gastrointestinal disturbance and kidney damage. The remaining four chemicals are naturally occurring radioactive isotopes that typically occur in the drinking water by the erosion of natural deposits and are considered carcinogenic. Noncarcinogenic effects of uranium on the kidneys and the liver, and radium to cause tumors have been documented.

Potential Concerns

In order to ensure tap water is safe, the United States Environmental Protection Agency (USEPA) and the California Department of Health Services prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The City of Ventura treats its water according to these regulations. The regulations of the Food and Drug Administration establish limits for contaminants in bottled water, which must provide the same protection for the public health.

Drinking water, including bottled water, may contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be

Ventura's water meets or exceeds state and federal standards

obtained by calling the USEPA's Safe Drinking Water Hotline at 1-800-426-4791.

Sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and can pick up contaminants resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria from sewage treatment plants, septic systems, agriculture and livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides from a variety of sources, such as agriculture, urban stormwater runoff and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- Radioactive contaminants can be naturally occurring or be the result of oil and gas production and mining activities.

Some people are more vulnerable to contaminants in drinking water than the general population. Immuno-compromised individuals, such as people with cancer, those undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people and infants can be particularly at risk from infections and are at greater risk of developing life-threatening illnesses. The City encourages immuno-compromised individuals to consult their doctors regarding appropriate precautions to avoid infection.

The City takes precautions to eliminate the risk of infection from microbial contaminants, including Giardia and Cryptosporidium, from its water system. These organisms are found in surface water throughout the United States and ingesting them may cause an abdominal infection. Symptoms of infection include nausea, diarrhea and abdominal cramps. The City has been sampling for possible risks present in the Ventura River Watershed since 2000. The City's treatment processes for surface water include coagulation, filtration and Chloramine disinfection to remove these organisms. The USEPA and the Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial contaminants are available from the Safe Drinking Hotline at 1-800-426-4791.

Water Quality Terminology

The Ventura's Water Quality Summary, on the back page, shows constituents measured in Ventura's water and reported to the State Department of Health Services, and in some cases the USEPA. Some of the terminology used is described below:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary (health related) MCLs are set as close to the Public Health Goals (PHGs) or Maximum Contaminant Level Goals (MCLGs) as is economically and technologically feasible. Secondary (aesthetically related) MCLs are set to protect the odor, taste and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of contaminant in drinking water below which there is no known or expected risk to one's health. MCLGs are set by the USEPA.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to one's health. The California Environmental Protection Agency sets PHGs.

Maximum Residual Disinfectant Level (MRDL): The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a disinfectant added for water treatment below, which there is no known or expected risk to health. MRDLs are set by the USEPA.

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Regulatory Action Level (RAL): The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.

For More Information

☞ **If you would like more information regarding the City's water quality or studies, please contact Ventura's Water Superintendent at 652-4500. This Water Consumer Confidence Report is also available on the City's website at www.cityofventura.net**

☞ **You are invited to express your opinions at City Council meetings held each Monday at 7 p.m. in the Council Chambers at Ventura City Hall, 501 Poli Street.**

☞ **Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien. Para más información, por favor llame 658-4785. Copias del informe de agua en espanol pueden ser obtenidas llamando al 658-4785.**

FutureFocus Newsletter is published six times a year for residents by the City of San Buenaventura. We welcome your suggestions. Please send any comments to:

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Printed on Recycled Paper

Ventura's Water Quality Summary 2005

Utilizing data collected in 2004.
Only water quality constituents detected by laboratory testing appear in the chart.

PRIMARY STANDARDS (PDWS)	Units	Maximum Level MCL	State Goal PHG	Ventura River Average	Ventura River Range	Ground Water Average	Ground Water Range	CMWD Average	CMWD Range	Major Sources of Contamination in Drinking Water
Water Clarity										
Treated Turbidity	NTU	TT	NA	0.9 (a)	0.07-0.12(a)	NA	NA	0.07 (b)	0.01-0.07 (b)	Process and source variations.
Radioactive Contaminants (e)										
Gross Alpha particle activity	pCi/l	15	NA	4.65	1.7 - 10.0	7.5	1.9 - 17.5	1.1	0.3 - 2.1	Erosion of natural deposits
Radium 226	pCi/l	5	NA	0.10	ND - 0.23	0.50	0.12 - 0.89	NA	NA	Erosion of natural deposits
Uranium (c)	pCi/l	20	0.5	3.13	2.1 - 4.0	4.8	3.8 - 6.8	NA	NA	Erosion of natural deposits
Inorganic Contaminants										
Arsenic	ppb	50	0	ND	ND	ND	ND	2.0	2.0	Erosion of natural deposits runoff from orchards; glass and electronics production waste.
Fluoride	ppm	2	1	0.45	0.34 - 0.50	0.49	0.35 - 0.67	0.4	0.4	Erosion of natural deposits water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
Selenium	ppb	50	NA	ND	ND	9.3	ND - 25	ND	ND	Discharge from refineries or manufacturers; erosion of natural deposits.
Nitrate (as Nitrogen)	ppm	10	10	0.6	0.4 - 0.9	0.9	ND - 2.8	ND	ND	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.

PRIMARY STANDARDS for Distribution System	Units	MCL MRDL	PHG (MCLG) MRDLG	Distribution System Average	Distribution System Range	Major Sources of Contamination in Drinking Water
Disinfection						
Chloramine Residual	ppm	4	4	2.7	1.9 - 2.8	Drinking water disinfectant added for treatment.
Disinfection By Products						
Total Trihalomethanes	ppb	80	NA	32 (c)	5 - 62	By-product of drinking water chlorination.
Total Haloacetic Acids	ppb	60	NA	21 (c)	ND - 64	By-product of drinking water chlorination.
Microbiological Contaminants						
Total Coliform Bacteria	NA	5%	0	0	0	Naturally present in the environment.
Fecal Coliform Bacteria	NA	0	0	0	0	Human and animal fecal waste.

Lead and Copper Samples	Units	RAL	PHG	Samples Collected		Above RAL	90th Percentile	Major Sources of Contamination in Drinking Water
Lead	ppb	15	2	2	36 (d)	0	3	Internal corrosion of household plumbing systems.
Copper	ppm	1.3	0.17	0.17	36 (d)	1	1.1	Internal corrosion of household plumbing systems.

LEGEND

- **NA:** Not applicable
- **ND:** Not detectable
- **NS:** No standard
- **NTU:** Turbidity, a measure of the clarity or cloudiness of the water.
- **ppb:** Parts per billion or micrograms per liter.
- **ppm:** Parts per million or milligrams per liter.
- **pCi/l:** Picocuries per liter, a measure of radioactivity in water.
- **CMWD:** Casitas Municipal Water District
- **TT:** Treatment Techniques. The approved filtration technology used for performance standards that must be met through the water treatment process.

SECONDARY STANDARDS		Units	Maximum Level MCL	Ventura River Average	Ventura River Range	Ground Water Average	Ground Water Range	CMWD Average	CMWD Range
Aesthetic Standards	Color	Color	15	ND	ND - 5	ND	ND - 4	10	10
	Odor	Threshold	3	ND	ND - 1	ND	ND	1	1 - 2
	Chloride	ppm	500	43	37 - 51	69	50 - 93	13	13
	Corrosivity	ppb	Non corrosive	0.19	-0.07 - 0.36	0.55	0.04 - 0.89	0.1	0.1
	Iron (TT)	ppb	300	ND	ND	ND	ND - 400	NS	NS
	Total dissolved solids	ppm	1000	548	412 - 644	1242	952 - 1680	350	350
	Specific conductance	umhos	1600	800	739 - 849	1451	1365 - 2380	537	537
	Sulfate	ppm	500	195	168 - 222	592	423 - 880	138	138
Additional Constituents	pH	pH units	6.5 - 8.5	7.6	7.4 - 7.8	7.6	7.1 - 8.0	7.32	7.01 - 7.82
	Hardness	ppm	NS	356	305 - 405	662	550 - 816	219	219
	Calcium	ppm	NS	94	79 - 111	180	154 - 216	50	50
	Magnesium	ppm	NS	29	26 - 33	52	40 - 74	23	23
	Manganese (TT)	ppb	50	ND	ND	ND	ND - 170	ND	ND
	Sodium	ppm	NS	38	30 - 46	133	85 - 188	26	26
	Phosphate	ppm	NS	0.53	0.19 - 1.29	0.24	0.05 - 0.72	1.6	0.33 - 2.87
	Potassium	ppm	NS	2.4	1.7 - 2.7	5.1	4.1 - 6.6	3.0	3.0
	Total Alkalinity	ppm	NS	172	133 - 212	260	226 - 295	120	120

Unregulated Contaminant Monitoring (e) (UCMR)	Units	Maximum Level MCL	Ventura River Average	Ventura River Range	Ground Water Average	Ground Water Range	CMWD Detection	CMWD Range
Boron	ppb	NS	440	400 - 460	620	520 - 730	200	200
Vanadium	ppb	NS	1.8	ND - 4.3	3.9	ND - 6.1	ND	ND

Conserve Our Water (COW)
2004 Annual Poster Contest Entry

Hang Yuan
Cabrillo Middle School, 8th Grade, First Place

Footnotes: (a) Average is maximum reading Avenue Plant Surface Filtration (TT) = 0.3 NTU in 95% of samples not to exceed 1.0 NTU for more than one hour. (b) Average is maximum reading CMWD Direct Filtration (TT) = 95% of samples equal or below 0.2 NTU. (c) Highest running average cannot exceed the MCL. (d) Samples were taken at selected households on a first draw in August 2002. (e) Monitoring completed in 2003.

City of Ventura Water Consumer Confidence Report

The City of Ventura welcomes this opportunity to provide you with water quality information. This Water Consumer Confidence Report was prepared in compliance with regulatory requirements utilizing data gathered in 2004. Ventura's Water Division works to ensure that Ventura's water meets or exceeds state and federal standards.

Ventura's Water Sources

The City has three local water sources; each accounts for approximately one third of the entire water supply. A portion of Ventura's water is from the Ventura River and is pumped from four shallow wells. Water is also distributed from Lake Casitas, which is operated and treated by the Casitas Municipal Water District (CMWD). Additional water is pumped from groundwater wells located in the City's east side. In order to produce, treat and distribute safe water to our customers, the City owns and operates 11 wells, three water treatment plants, 23 booster pump stations, 31 water storage reservoirs and more than 500 miles of distribution pipelines.

Water Treatment

All of the City's water receives treatment. Water from the Ventura River is treated by a method referred to as Conventional Surface Water Treatment. This process involves coagulation (chemical addition), flocculation (gentle agitation), sedimentation (settling particles), filtration, and disinfection with chloramines. The groundwater sources are treated to remove iron, manganese and turbidity. Additional treatment is provided at each plant to help prevent the corrosion of plumbing in your home. CMWD treats the water from Lake Casitas with direct filtration and chloramines for disinfection prior to delivery into the City's system.

The City uses chloramines for disinfection. Chloramines are chemicals that contain chlorine and ammonia. Chloramines were selected as the preferred disinfectant because of their ability to provide disinfection over an extended period of time, and for better taste and fewer odors compared to using chlorine alone. Chloramines have been proven to help treat water to lower levels of trihalomethanes (TTHMs) and haloacetic acids (HAAs), which are potentially harmful byproducts of the chlorine disinfection process.

Although Chloramines are desirable in protecting the water distribution system, their use requires additional precautions for some water uses. If a member of your household requires dialysis, you should contact your physician or dialysis service provider to assure proper protective equipment is used. If you use tap water for fish or other aquatic animals that use gills for breathing, you need to test and be sure the chloramines are completely removed before use. Setting water in an open container for 24 hours prior to use will **not** remove all chloramines in the water. Your local pet store can provide information and products for the proper removal of chloramines.

Water Quality Monitoring

Ventura owns and operates a full-scale, state-certified laboratory to monitor water quality. State-certified operators run Ventura's treatment plants. The plants have instrumentation that continuously monitors specific water constituents to ensure that the water is of high quality.

In addition to the water quality constituents listed on the Water Quality Summary Table (see back page), the City sampled in 2003 for many other regulated, and 12 federal and eight state unregulated contaminants all of which were below detection limits, except for Boron and Vanadium.

Water Quality Studies

The City, like other water purveyors in the country, completed a federally mandated review of its water system security. This review evaluated the water facilities and prioritized security measures that can help minimize the risk of damage or contamination. The City already has and will continue to take steps to improve the protection of City water facilities. Since 2002, the City has monitored water quality along the Ventura River and San Antonio Creek at 15 sites for Cryptosporidium, Giardia, Bacteria, Nutrients, Bromide, Total Organic Carbon, Chloride and Conductivity. The City will update a Sanitary Survey of the Ventura River Lower Watershed in 2006.

A separate Drinking Water Source Assessment for the City's water supplies was completed in January 2002. No contaminants have been detected in the water supply from such surrounding sources as gas stations, agricultural drainage, dry cleaners, urban run off, sewer systems, metal plating/finishing and repair shops.

As a water supplier, the City must complete an evaluation of its drinking water supply with respect to Public Health Goals (PHG) every three years. The goals are not mandatory limits and are based solely on public health risk factors. The City completed an evaluation in 2004, which determined that six chemicals exceeded a PHG. These were lead, copper, uranium, gross alpha & beta particles, and radium 226. Copper and lead can be found in water as a result of the corrosion of plumbing fixtures used in most homes. The City has conducted tests to optimize its treatment with corrosion inhibitors in an effort to further reduce lead and copper levels. High levels of lead can result in kidney problems or high blood pressure, and delays in physical and mental development in children. High levels of copper are known to cause gastrointestinal disturbance and kidney damage. The remaining four chemicals are naturally occurring radioactive isotopes that typically occur in the drinking water by the erosion of natural deposits and are considered carcinogenic. Noncarcinogenic effects of uranium on the kidneys and the liver, and radium to cause tumors have been documented.

Potential Concerns

In order to ensure tap water is safe, the United States Environmental Protection Agency (USEPA) and the California Department of Health Services prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The City of Ventura treats its water according to these regulations. The regulations of the Food and Drug Administration establish limits for contaminants in bottled water, which must provide the same protection for the public health.

Drinking water, including bottled water, may contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be

obtained by calling the USEPA's Safe Drinking Water Hotline at 1-800-426-4791.

Sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and can pick up contaminants resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria from sewage treatment plants, septic systems, agriculture and livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides from a variety of sources, such as agriculture, urban stormwater runoff and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- Radioactive contaminants can be naturally occurring or be the result of oil and gas production and mining activities.

Some people are more vulnerable to contaminants in drinking water than the general population. Immuno-compromised individuals, such as people with cancer, those undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people and infants can be particularly at risk from infections and are at greater risk of developing life threatening illnesses. The City encourages immuno-compromised individuals to consult their doctors regarding appropriate precautions to avoid infection.

The City takes precautions to eliminate the risk of infection from microbial contaminants, including Giardia and Cryptosporidium, from its water system. These organisms are found in surface water throughout the United States and ingesting them may cause an abdominal infection. Symptoms of infection include nausea, diarrhea and abdominal cramps. The City has been sampling for possible risks present in the Ventura River Watershed since 2000. The City's treatment processes for surface water include coagulation, filtration and Chloramine disinfection to remove these organisms. The USEPA and the Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial contaminants are available from the Safe Drinking Hotline at 1-800-426-4791.

Water Quality Terminology

The Ventura's Water Quality Summary, on the back page, shows constituents measured in Ventura's water and reported to the State Department of Health Services, and in some cases the USEPA. Some of the terminology used is described below:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary (health related) MCLs are set as close to the Public Health Goals (PHGs) or Maximum Contaminant Level Goals (MCLGs) as is economically and technologically feasible. Secondary (aesthetically related) MCLs are set to protect the odor, taste and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of contaminant in drinking water below which there is no known or expected risk to one's health. MCLGs are set by the USEPA.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to one's health. The California Environmental Protection Agency sets PHGs.

Maximum Residual Disinfectant Level (MRDL): The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a disinfectant added for water treatment below, which there is no known or expected risk to health. MRDLs are set by the USEPA.

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Regulatory Action Level (RAL): The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.

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Radioactive Contaminants (e)										
Gross Alpha particle activity	pCi/l	15	NA	4.65	1.7 - 10.0	7.5	1.9 - 17.5	1.1	0.3 - 2.1	Erosion of natural deposits.
Radium 226	pCi/l	5	NA	0.10	ND - 0.23	0.50	0.12 - 0.89	NA	NA	Erosion of natural deposits.
Uranium (c)	pCi/l	20	0.5	3.13	2.1 - 4.0	4.8	3.8 - 6.8	NA	NA	Erosion of natural deposits.
Inorganic Contaminants										
Arsenic	ppb	50	0	ND	ND	ND	ND	2.0	2.0	Erosion of natural deposits; runoff from orchards; glass and electronics production waste.
Fluoride	ppm	2	1	0.45	0.34 - 0.50	0.4[9]	0.35 - 0.67	0.4	0.4	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
Selenium	ppb	50	NA	ND	ND	0.2	ND - 2.5	ND	ND	Discharge from refineries or manufacturers; erosion of natural deposits.
Nitrate (as Nitrogen)	ppm	10	10	0.6	0.4 - 0.9	0.9	ND - 2.8	ND	ND	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.

PRIMARY STANDARDS (Disinfection System)	Units	MCL MRDL	PHG (MCLG) MRDLG	Distribution System Average	Distribution System Range	Major Sources of Contamination in Drinking Water
Disinfection						
Chloramine Residual	ppm	4	4	2.7	1.9 - 2.8	Drinking water disinfectant added for treatment.
Disinfection By Products						
Total Trihalomethanes	ppb	80	NA	32 (c)	5 - 62	By-product of drinking water chlorination.
Total Habacetic Acids	ppb	60	NA	21 (c)	ND - 64	By-product of drinking water chlorination.
Microbiological Contaminants						
Total Coiform Bacteria	NA	5%	0	0	0	Naturally present in the environment
Fecal Coiform Bacteria	NA	0	0	0	0	Human and animal fecal waste.

LEGEND

NA: Not applicable
ND: Not detectable
NS: No standard
NTU: Turbidity, a measure of the clarity or cloudiness of the water.
ppb: Parts per billion or micrograms per liter.
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TT: Treatment Techniques. The approved filtration technology used for perfor mance standards that must be me through the water treatment process

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Lead	ppb	15	2	36 (d)	0	3	Internal corrosion of household plumbing systems.
Copper	ppm	1.3	0.17	0.17	1	1.1	Internal corrosion of household plumbing systems.

SECONDARY STANDARDS		Units	Maximum Level MCL	Ventura River Average	Ventura River Range	Ground Water Average	Ground Water Range	CMWD Average	CMWD Range
Aesthetic Standards	Color	Color	15	ND	ND - 5	ND	ND - 4	10	10
	Odor	Threshold	3	ND	ND - 1	ND	ND	1	1 - 2
	Chloride	ppm	500	43	37 - 51	69	50 - 93	53	53
	Corrosivity	ppb	Non corrosive	0.19	-0.07 - 0.36	0.55	0.04 - 0.89	0.1	0.1
	Iron (TT)	ppb	300	ND	ND	ND	ND - 400	NS	NS
	Total dissolved solids	ppm	1000	548	412 - 644	1242	952 - 1680	350	350
	Specific conductance	umhos	1600	800	739 - 849	1451	1365 - 2380	537	537
	Sulfate	ppm	500	195	168 - 222	592	423 - 880	138	138
Additional Constituents	pH	pH units	6.5 - 8.5	7.6	7.4 - 7.8	7.6	7.1 - 8.0	7.32	7.01 - 7.82
	Hardness	ppm	NS	356	305 - 405	662	550 - 816	219	219
	Calcium	ppm	NS	94	79 - 111	180	154 - 216	50	50
	Magnesium	ppm	NS	29	26 - 33	52	40 - 74	23	23
	Manganese (TT)	ppb	50	ND	ND	ND	ND - 170	ND	ND
	Sodium	ppm	NS	38	30 - 46	133	85 - 188	26	26
	Phosphate	ppm	NS	0.53	0.19 - 1.29	0.24	0.05 - 0.72	1.6	0.33 - 2.87
	Potassium	ppm	NS	2.4	1.7 - 2.7	5.1	4.1 - 5.6	3.0	3.0
	Total Alkalinity	ppm	NS	172	133 - 212	260	226 - 295	120	120

Unregulated Contaminant Monitoring (e) (UCMR)	Units	Maximum Level MCL	Ventura River Average	Ventura River Range	Ground Water Average	Ground Water Range	CMWD Detection	CMWD Range
Boron	ppb	NS	440	400 - 460	620	520 - 730	200	200
Vanadium	ppb	NS	1.8	ND - 4.3	2.9	ND - 6.1	ND	ND

APPENDIX D

City Ordinances

ORDINANCE NO. 89-6

AN ORDINANCE OF THE CITY OF SAN BUENAVENTURA ADDING AN ARTICLE 9 TO CHAPTER 5 OF DIVISION 4 OF THE SAN BUENAVENTURA ORDINANCE CODE ESTABLISHING REGULATIONS PERTAINING TO WATER WASTE AND AMENDING SECTION 13.51 PERTAINING TO CODE ENFORCEMENT

The Council of the City of San Buenaventura does ordain as follows:

SECTION 1: It is hereby declared that because of recurrent critically dry conditions throughout the State of California and limited available local surface and underground water supplies, the City of San Buenaventura must maximize its available water resources and prohibit wasteful water use practices.

SECTION 2: Article 9 is hereby added to Chapter 5, Division 4 of the San Buenaventura Ordinance Code to read as follows:

"Article 9 - Water Conservation - Sec. 4590

Sec. 4591 WATER WASTE PROHIBITED. No person shall use or permit the use of water:

(a) For the watering of turf, ornamental landscape, open ground crops and trees, including agricultural irrigation, in a manner or to an extent which allows water to run to waste; or

(b) Such that the escape of water through leaks, breaks or malfunction within the water user's plumbing or distribution system occurs for any period of time beyond which such break or leak should reasonably have been discovered and corrected. It shall be presumed that a period of forty-eight hours after the water user discovers such leak, break or malfunction, or receives notice from the City of such condition, whichever occurs first, is a reasonable time within which to correct such condition; or

(c) In conjunction with use of a handheld hose to wash automobiles, trucks, trailers, boats, or other types of mobile equipment without the use of a workable positive shutoff nozzle; or

(d) For the operation of any ornamental fountain, or similar structures, unless water for such use is recycled for lawful reuse without substantial loss; or

(e) For washing of sidewalks, walkways, driveways, parking lots or any other hard-surfaced areas by hose or flooding, except as otherwise necessary to prevent or eliminate conditions dangerous to the public health and safety **or for other legitimate necessity**; or

(f) For serving of water by a restaurant to its customers without first being requested by the customer; or

(g) For any indiscriminate running of water or washing with water not otherwise prohibited above which is wasteful and without reasonable purpose.

Sec. 4591.1 FAILURE TO COMPLY.

(a) Civil Penalties. In addition to any other penalties or sanctions provided by this Code, the following civil penalties shall apply for violation of any of the provisions of this Article:

1. For the first violation of any of the provisions of this Article a written notice is to be given.

2. For the **second** violation of any of the provisions of this Article a surcharge penalty is hereby imposed in an amount equal to fifty percent (50%) of the most recent bi-monthly water bill (exclusive of the sewer portion of the bill), or twenty-five dollars ($25.00), whichever is less, payable as part of the water bill, by the customer at the premises at which the violation occurred.

3. For the **third** violation of any of the provisions of this Article a surcharge penalty is hereby imposed in an amount equal to twenty-five percent (25%) of the most recent bi-monthly water bill (exclusive of the sewer portion of the bill), or fifty dollars ($50.00), whichever is greater. This penalty is payable as part of the water bill, by the customer at the premises at which the violation occurred.

4. For a **fourth** violation of any of the provisions of this Article within twelve (12) calendar months, the City will install a flow restricting device of 1 GPM capacity for services up to one and one half (1-1/2) inch size, and comparatively sized restrictors for larger services, on the service of the customer at the premises at which the violation occurred for a period of not less than forty-eight (48) hours. The charge for installing such a flow restricting device will be based upon the size of the meter and the actual cost of installation. The charge for removal of the flow restricting device and restoration of normal

service shall be based on the actual cost involved. Said charges shall be payable by said customer as part of the water bill. Restoration of normal service will be performed during the hours of 8:00 a.m. to 4:00 p.m. on regular working days. In addition, a surcharge penalty of 50% of the most recent water bill shall be imposed for restoration of normal service, payable by said customer as part of the water bill.

5. For any subsequent violation after the fourth violation of any of the provisions of this Article within twelve (12) calendar months, the City may discontinue water service to the customer at the premises at which the violation occurred.

(b) Notice. The City will give notice of each violation to the customer at the premises at which the violation occurred, as follows:

1. For a first, second or third violation, the City may give written notice of the fact of such violation to the customer personally or by regular mail.

2. If the penalty assessed is, or includes the installation of a flow restrictor or the discontinuance of water service to the customer for any period of time whatever, notice of the violation will be given in the following manner:

A. by giving written notice thereof to the customer personally; or

B. If the customer is absent from or unavailable at either the customer's place of residence or place of business, by leaving a copy with an adult at either place, and sending a copy through the United States mail addressed to the customer at either the customer's place of business or residence; or

C. If such place of residence and business cannot be ascertained, or an adult cannot be found on the premises, then by affixing a copy in a conspicuous place on the property where the failure to comply has occurred and also by delivering a copy to a person residing at the premises, if such person can be found, and also by sending a copy through the United States mail addressed to the customer at the customer's billing address and to the place where the property is situated.

D. All notices will contain, in addition to the facts of the violation, a statement of the possible penalties for each violation, a statement informing the customer of his right to a hearing on the violation, a brief summary of the appeal process specified herein, and the date and time termination will occur.

(c) Hearing. Any customer against whom a penalty is to be levied pursuant to this section shall have a right to a hearing, in the first instance by the City Water Superintendent, with the right of appeal to the City Public Works Director, on the merits of the alleged violation, upon the written request of that customer to the City Clerk within fifteen (15) days of the date of notification of the violation. Penalties, including termination of water service, will be stayed until any such hearing is conducted and a written decision is made by the City Water Superintendent or his or her designee.

(d) Appeal of Decision of Water Superintendent. A request for an appeal must be in writing and filed with the City Clerk. The filing by a customer of a reqest for an appeal for any form of relief must be made within fifteen (15) days of the decision of the Water Superintendent. Filing of such a request will automatically stay the implementation of the proposed course of action, pending the decision of the Public Works Director. No other or further stay will be granted. The appeal hearing will be scheduled to occur within a reasonable, prompt period of time following the written notice of appeal. The water user may present any evidence which would tend to show that the alleged wasteful water use has not occurred. Formal rules of evidence will not apply and all relevant evidence customarily relied upon by reasonable persons in the conduct of serious business affairs will be admissible, unless a sound objection warrants its exclusion by the City Public Works Director. The decision of the City Public Works Director shall be final.

(e) Reconnection. Where water service is disconnected, as authorized above, it will be reconnected upon correction of the condition or activity and the payment of the estimated reconnection charge.

(f) Public Health and Safety. Nothing contained in this Article shall be construed to require the City to curtail the supply of water to any customer when, in the discretion of the City Water Superintendent or Public Works Director, such water is required by that customer to maintain an adequate level of public health and safety.

(g) Reservation of Rights. The rights of the City hereunder shall be cumulative to any other rights of the City to discontinue service. All monies collected by the City pursuant to this Article shall be deposited in the City water fund.

Sec. 4591.2 APPLICABILITY. The provisions of this Article shall apply to all persons using City water, both in and outside the City, and within City water service areas. Sections 13 through 13.4 of the San Buenaventura Ordinance Code shall only apply to water users within the City, provided, however, that section 4591(g) is not intended to define an activity subject to criminal prosecution. **Violations of section 4591 shall be punishable as specifically provided in Ordinance Code section 13.2."**

SECTION 3: **Section 13.2 of the City of San Buenaventura Ordinance Code is hereby amended to read as follows:**

"Section 13.2 CERTAIN VIOLATIONS AS INFRACTIONS. Notwithstanding the provisions of section 13 or any other provision of this Code, the violation of any of the provisions of the San Buenaventura Ordinance Code contained in any of the following enumerated divisions, chapters, articles or sections shall be an infraction, provided, however, that a fourth or additional violation of the same Code section, regardless of the time of occurrence, shall constitute a misdemeanor: Ordinance Code sections 4112.51; 4112.52; 4451; 4458; 4591; 6510; 6513."

SECTION 4: Section 13.51 of the San Buenaventura Ordinance Code is hereby amended to read as follows:

"Sec. 13.51 CODE ENFORCEMENT [RESPONSIBILITY OF CERTAIN OFFICIALS]. The Police Department, Fire Department, Building Official, Code Enforcement officer and other designated persons shall be responsible for enforcement of the various provisions of this Code under their respective authority or as is specifically assigned to them.

(a) Police officers have full authority to arrest persons for violations of the provisions of this Code pursuant to the provisions of the California Penal Code.

(b) To the extent necessary, members of the Fire Department are hereby authorized to arrest persons pursuant to Penal Code section 836.5 for violations of law pertaining to fire regulations or otherwise within their enforcement

authority. This authority is in addition to all other authority provided by law.

(c) The Building Official and City Code Enforcement officer, and their respective designated assistants, shall have authority to arrest persons for purposes of issuing citations for violations of any of the provisions of this Code within their respective areas of responsibility pursuant to the authority and the procedures specified in Penal code section 836.5

(d) The Water Superintendent, Assistant Water Superintendent, and their respective designated assistants shall have authority to arrest persons for the purposes of issuing citations for violations of any of the provisions of Article 9 of Chapter 5 of Division 4 of this Code."

SECTION 5: Severability. It is the intent of the City Council that any section or portion of this ordinance shall be severable as provided in section 12 of the Ordinance Code.

SECTION 6: This ordinance shall take effect on the 31st day after final passage and adoption.

PASSED AND ADOPTED on this 3rd day of April, 1989.

/s/ JAMES L. MONAHAN.
Mayor

ATTEST:

/s/ BARBARA J. KAM
City Clerk

STATE OF CALIFORNIA)
COUNTY OF VENTURA) ss
CITY OF SAN BUENAVENTURA)

I, BARBARA J. KAM, City Clerk of the City of San Buenaventura, California, do hereby certify that the foregoing Ordinance was passed and adopted by the City Council of the City, on the 3rd day of April, 1989, by the following vote, to wit:

AYES: Councilmembers Sullard, Francis, Villeneuve, McWherter and Crew.

NOES: Councilmembers Drake and Monahan.

ABSENT: None.

IN WITNESS WHEREOF I, have hereunto set my hand and affixed the official seal of the City this 4th day of April, 1989.

/s/ BARBARA J. KAM
City Clerk

CITY OF SAN BUENAVENTURA

APPENDIX E

PRINCIPLES AND GUIDELINES

FOR

EMERGENCY WATER ORDINANCE

PRINCIPLES AND GUIDELINES

FOR

EMERGENCY WATER ORDINANCE

A. PURPOSE OF ORDINANCE

An emergency ordinance shall be adopted in order to provide the City Council and the City Manager with appropriate guidelines, procedures and regulations to implement the above procedures when appropriate. The provisions of the ordinance shall be developed and implemented in a manner to provide water service during emergency conditions to all the City customers in a fair and equitable manner.

B. DEFINITIONS

1. A Level 1 Alert emergency condition will occur in the event of a catastrophe or disaster caused by a natural phenomenon or man-made event such that the availability of the water supply from City water sources on a short-term basis has become unreliable as determined by the City Manager.

   Declaration of a Level 1 Alert may be the result of any of the following:

   (a) Earthquakes.

   (b) Power outages.

   (c) Chemical/toxic spills in City water sources.

   (d) California Department of Health Services' determination that groundwater basins are contaminated.

(e) Sudden deterioration of water quality in City water sources.

(f) Interruption of service due to pipeline breaks, loss of pumping plants, chlorination stations, etc.

(g) Immediate hazard to public health.

(h) Uncontrolled watershed burn resulting in flooding, thereby impacting water served from Lake Casitas because of:

(1) High turbidity;

(2) Bacteriological quality;

(3) High organic content;

(4) Damage to distribution system.

2. A Level 2 Alert emergency condition will occur in the event that the availability of supply from City Water Sources becomes unreliable as determined by the City Council. Such a determination would be made as a result of conditions which impact the water supply over an extended period of time. Declaration of a Level 2 Alert may be the result of any of the following:

(a) Restricted supplies from Casitas Municipal Water District.

(b) Low water levels in the groundwater basins.

(c) Increases in demand for Casitas water.

(d) Abandonment of wells due to low water levels in groundwater basins and/or well refurbishing costs.

(e) Surface diversion resources depleted.

(f) Records indicate rates of withdrawals of water from Lake Casitas are in excess of the safe yield.

3. (a) Lifeline Water Usage is the absolute minimum amount of water necessary to sustain human life.

(b) Baseline Water Usage is an amount of water that will be assigned by Casitas to each service during the implementation of the provisions of the emergency ordinance related to allocations.

(c) Total Available Water Supply is the total amount of water, as determined by the City Council, which will be distributed during an emergency condition at either alert level.

C. PRIORITIES OF WATER USAGE

1. The City Council declares by adoption of this Urban Water Management Plan the following priorities for the distribution of City water during an emergency condition for both alert levels are:

(a) Residential water use without alternate water sources.

(b) Irrigation water use without alternate water sources.

(c) Residential water use with alternate water sources.

(d) Irrigation water use with alternate water sources.

(e) Industrial and industrial resale.

(1) Oil recovery program
(2) Others, as defined.

2. The City Council will establish a baseline water usage for each residential service, each irrigation service and each industrial service based upon historical use and/or other fair and equitable bases.

D. PROVISIONS TO BE IMPLEMENTED

1. Level 1 Alert - For a period of time as determined by the City Manager or his designate, the City Manager or his designate may:

   (a) Direct the implementation of appropriate portions of Interim Control Measures as may be adopted relative to the storage and distribution of City water.

   (b) Inform all City customers that City water is not to be used for nonlife-support purposes; e.g., washing down driveways, sidewalks, etc. or watering any landscaping, etc.

   (c) Direct all irrigation customers and all other water uses, when possible, to utilize their groundwater or other surface water sources and cease using water from the City Water System.

   (d) Direct all oil companies to stop taking City water for oil recovery or other nonlife-sustaining purposes.

   (e) Direct all other water users which are customers of the City to practice water conservation measures similar to those contained herein.

   (f) If appropriate, advise all City customers that City water is to be boiled prior to using as drinking water.

   (g) Other orders as may be deemed appropriate under the existing circumstances.

2. Level 2 A Alert - For a period of time as determined by the City Council, the City Council:

(a) Shall establish the baseline water usage for each service connection.

(b) Shall establish a water allocation program based on historical uses of City water or other fair and equitable bases which will establish the amount of water that can be obtained from the City by each customer of the City.

(c) May implement an increasing-block rate structure for any classification of water service.

(d) Shall require all water users taking water from the City to implement water conservation measures similar to those contained herein.

(e) May direct all customers to utilize their groundwater or other water resources as their sole water source when practicable, and not take any City water during the period of time so established.

(f) May direct the oil companies to cease taking any City water for secondary oil recovery purposes or other non-life-sustaining purposes.

(g) The City Council may place a moratorium for all building permits, lot splits or subdivisions within the City's boundaries.

(h) Shall direct all customers of the City who have well to report the condition of their wells to the City when reasonably requested, including the capacity of the well and the quality of the water.

E. DECLARATION OF EMERGENCY

1. The City Manager shall have the authority to declare a Level 1 Alert for an emergency condition and to implement the provisions of the emergency ordinance related to the Level 1 Alert.

2. The City Council may declare by resolution either level of alert and implement the appropriate provisions of that alert level.

JM/lm/PW2

A COMPILATION OF ORDINANCES 90-3, 90-8, AND 90-16
AS ADOPTED BY THE CITY COUNCIL OF THE
CITY OF SAN BUENAVENTURA
ESTABLISHING MANDATORY WATER CONSERVATION REGULATIONS

THE CITY COUNCIL OF THE CITY OF SAN BUENAVENTURA DOES ORDAIN as follows:

Section 1. Purpose and Scope

This ordinance adopts regulations to deal with the water shortage emergency condition which exists within the area presently served by the City of San Buenaventura, as declared by resolution of this City Council. These regulations shall become effective with the effective date of this ordinance and shall be in effect until the City Council finds and declares by resolution that the water shortage emergency condition no longer exists.

Section 2. Findings

The City Council finds, determines and declares that the following facts are true:

(a) The City Council has conducted duly noticed public hearings on February 12 and 26, 1990 for the purpose of determining whether a water shortage emergency condition exists and, if so, what regulations should be adopted in response to the shortage.

(b) The City Council has adopted Resolution No. 90-16 on February 26, 1990 which declares that a water shortage emergency condition exists and that the ordinary water demands and requirements of the City water customers cannot be satisfied.

(c) The regulations set forth herein are necessary and proper to protect the water supply for human consumption, sanitation and fire protection during the duration of the water shortage emergency condition.

Section 3. Definitions

The following terms are defined for the purposes of the ordinance:

(a) "Customer" means any person, partnership, business, corporation or governmental agency that receives water from the City of San Buenaventura (hereinafter "City") water system.

(b) "Applicant" means a person, partnership, business, corporation or governmental agency that requests water service from the City.

(c) "Average annual usage" means the amount of water delivered to each customer's property during the bi-monthly billing period from calendar year 1987 through calendar year 1989.

Section 4. Prohibition of New Water Service Connections, Increase in Size of Existing Connections, Increase in Plumbing Fixtures, Exemptions, Wells.

(a) No new water service connections will be permitted nor will an increase in the size of an already existing water service connection be permitted, nor will there be permitted any net increase in plumbing fixtures to an already existing water service connection, except for the following:

1. A new single family residence on an existing lot of record as of January 29, 1990.

2. Developments of other residential, commercial, industrial, or institutional uses which have received all their discretionary approvals as of January 29, 1990; or, for those that do not require discretionary approvals, have been accepted for plan check of building plans for building permits as of March 5, 1990.

3. Developments which have development agreements which include the right to connections.

4. Additions attached by a common wall with interconnecting space to existing single family residences contingent on the installation of water efficient plumbing fixtures and/or irrigation systems for all fixtures at those residences.

5. Additions attached by a common wall with interconnecting space to existing structures served by non-residential water accounts contingent on the installation of water efficient plumbing fixtures and/or irrigation systems for all fixtures at those accounts. Such additions to structures served by non-residential accounts shall not exceed 100% of the square footage of the structure before the addition, nor shall the cumulative additions to such structures during the current water shortage emergency condition exceed 100% of the square footage of the structure before the addition.

6. Approved automatic sprinkler systems for fire protection.

(b) Notwithstanding the provisions of section 4(a) of this ordinance, the City Council hereby determines that there is an ongoing high demand and need for low and moderate income housing as defined and described by this City's Comprehensive Plan. This same need for such low and moderate income housing has been stressed by the State Legislature and mandated in such provisions of the California Government Code as are found in Government Code sections 65008, 65009 and 50093 and other sections. Because of this overriding need, housing projects designated exclusively for low and moderate income housing, as defined by the City's Comprehensive Plan, may receive new water service connections, but all water used after said connection shall conform to the regulations promulgated herein as they now exist or as they may be amended to read later.

(c) The Water Superintendent, with the approval of the City Manager, may prescribe rules and regulations for the implementation of this ordinance that are not inconsistent with this ordinance.

(d) Applications for permits to drill, dig, sink or deepen into another aquifer any water well within the City of Ventura, or to tap or penetrate any subterranean water bearing gravel underlying the City will not be accepted or processed until the City Council finds and declares by resolution that the water shortage emergency condition no longer exists.

(e) Notwithstanding the provisions of 4 (a) of this ordinance, the City Council realizes that certain applicants for prospective developments which could have received all their discretionary approvals prior to January 29, 1990 were asked by the City Planner to postpone their appearances before the City Planning Commission solely for the City's convenience, and the representatives for such developments agreed in good faith to do so. This delay caused the final decision on the development project to come to the City Council after January 29, 1990. The City Council also recognizes there may be applicants who were affirmatively recruited by the City Redevelopment Administrator to undertake City sponsored development projects and invest substantial time and funds in said projects, but the projects would now be unable to go forward if no water connections were allowed. Because of these affirmative actions by the City, project applicants that have been affirmatively asked by the City Planner prior to January 29, 1990 to postpone a hearing on a project which otherwise would have been heard for final consideration before January 29, 1990, or have been asked by the City Redevelopment Administrator to undertake (and have commenced to undertake) a City sponsored project so

that substantial funds have been expended by applicant and an application for approval has been submitted prior to January 29, 1990, may receive new water service connections if the projects themselves are ultimately approved by the City, but all water used after said connections shall conform to the regulations promulgated herein as they now exist or as they may be amended to read later.

(f) Exempt from this ordinance are those customers in Lot 9 of Rancho Santa Clara Del Norte, including tract maps 1619 and 1900, whose water system is maintained by the City under a contractual agreement.

Section 5. Limits on Certain Uses

(a) Use of City potable water to flush the sanitary sewer system or storm drain system or City water for fire protection training is prohibited unless the prior written approval of the City's Water Superintendent is obtained.

(b) Use of City potable water for any purpose in excess of the amounts allocated in Section 6 for each class of use is prohibited.

(c) Use of City potable water is prohibited for construction purposes at job sites where it is possible to use reclaimed water.

Section 6. Water Allocations.

(a) The following classes of water use are hereby created;

(1) "Single family residential" which consists of water service to land improved with structures designed to serve as a residence for a single family.

(2) "Multiple family residential" which consists of water service to land improved with structures designed to serve as a residence for more than a single family, including condominiums, townhouses, mobile home parks and the like.

(3) "Non-residential," which consists of water service to land improved with structures designed to serve for uses other than residential uses and land without structures but used for agricultural purposes. The following kinds of water use are designated as non-residential: commercial, industrial, agricultural, irrigation, municipal, schools, churches, ground water, secondary oil recovery, temporary, fireline, and water rights.

(b) No Customer shall use City water for permitted uses in excess of the following allocations for each class of service.

(1) Single family residential accounts: Single family residences shall use no more than the equivalent of 294 gallons per day per residence, which equates to 24 hundred cubic feet (HCF) bi-monthly, plus 55% of the average annual usage in excess of 144 HCF at that residential service location but such increase not to exceed a maximum additional allowance of 30 HCF/yr. This maximum additional allowance not to exceed 30 HCF/yr. shall be allowed and distributed only over the three summer billing periods as determined by City Water Superintendent. This allocation is based on the assumption of 4 persons or less per household. For each additional permanent person residing at the residence, the allocation may be increased by action of the City by 49 gallons per day (4 HCF bi-monthly).

(2) Multiple family residential accounts: Multiple family residences shall use no more than the equivalent of 196 gallons per day per unit, which equates to 16 HCF bi-monthly, plus 40% of the average annual usage in excess of 96 HCF at that residential service location but such increase not to exceed a maximum allowance of 21 HCF/yr/unit. This maximum additional allowance not to exceed 21 HCF/yr./unit shall be allowed and distributed only over the three summer billing periods as determined by City Water Superintendent. This allocation is based on the assumption of 3 persons or less per household. For each additional permanent person residing at the residence, the allocation may be increased by action of the City by 49 gallons per day (4 HCF bi-monthly).

(3) Non-resident accounts:

(i) Except as specified below, each customer in the non-residential classification shall use during each bi-monthly billing period no more than 85% of that customer's average annual usage.

(ii) Each customer in the non-residential classification which customer is a government agency such as, but not limited to: the City of San Buenaventura, the County of Ventura, the

Ventura Unified School District, the Ventura County College District, the State of California or Special Districts, shall use during each bimonthly billing period no more than 80% of that customer's average annual usage.

(iii) Each non-residential account used only for ornamental landscaping shall use no more than 55% of that account's average annual usage.

(iv) Each non-residential irrigation account used for agricultural irrigation shall use no more than 85% of that account's average usage during a 12-month period.

(c) The Water Superintendent shall classify each customer and calculate each customer's allocation. The allocation shall reflect average annual usage patterns. Each customer shall be notified of the Water Superintendent's determination by mail deposited in the United States Postal Service.

(d) Establishment of allocations with no customer use history:

(1) Residential: Residential customers without a use history shall be assigned the applicable base allocation for single or multi-residential accounts, whichever classification is appropriate.

(2) Other use classifications: In order to determine water use allocations for a new non-residential use customer or for a change in property use, an application by the customer shall be submitted designating the intended use of the property, the square footage, and number of employees. An assignment of water use will be determined by the Water Superintendent after reviewing the above factors as well as comparing water use for similar types of property uses, averaging the water use and applying a 15% reduction to this amount.

Section 7. Request for Increases in Allocations

(a) All applications for an increase in allocation must be submitted in writing to the City Water Superintendent on a Water Division application form. Verification of residency, water efficient plumbing fixtures, and/or irrigation systems as defined in Section 9 will be required before considering additional allocations. Existing 3.5 gallon per flush toilets will not require replacement.

(b) Requests for increased allocations will be reviewed by the Water Conservation Office for recommendation to the Water Superintendent for approval, modified approval or denial. Requests for increased allocations in excess of the average historical use less 15% will not be recommended for approval except for reasons outlined in Section 7, subsection e, items 2, 9, 10 and 11.

(c) Single family residential account requests for an additional allocation based on more than four people residing at a residence shall show proof of residency for all residents at that property.

(d) Multiple family residential account requests for an additional allocation per unit for more than three people shall show proof of residency for all residents at that property.

(e) Additional water use may be allocated for the following reasons:

(1) Additional people residing full time at that residence.

(2) Medical and sanitation needs.

(3) Change of property use.

(4) Valid business in a residential home.

(5) Livestock such as cows, horses, or other similar large animals.

(6) Construction activity such as new home construction or remodels only if the use of reclaimed water is infeasible.

(7) Mature fruit trees up to 4 HCF per year for each mature fruit tree.

(8) Maintenance of landscaping required for slope stability or fire protection.

(9) Where a City audit of non-residential customer's usage shows that all reasonable conservation measures are being employed.

(10) Where a non-residential customer has a demonstrable growth in water use over the 1987 to 1989 period in providing a water-related service to the public, the use reduction will be based upon 1989 annual water use.

(11) Hospital and health care facilities.

(f) Notwithstanding the provisions of Section 7(a) of this ordinance, requests for additional allocation based upon more than four people residing at a single family residence [7(c)], more than three people per unit residing at a multiple family residence [7(d)], or medical and sanitation needs [7(e)(2)] will not require the installation of water efficient toilets as defined in Section 9 of this ordinance.

Section 8. Appeals

(a) Any customer may appeal for reconsideration of the Water Superintendent's classification of use or allocation on the basis of hardship or incorrect calculation. Appeals for reconsideration shall be processed as set forth below.

(1) Any customer who wishes to appeal for reconsideration of the classification or allocation he or she received shall do so in writing to the City Water Superintendent by either using the forms provided by the City or by letter setting forth the reasons for the appeal.

(2) The appeal for reconsideration shall be reviewed by the City Water Conservation Office and a site visit scheduled if required.

(3) If an appeal for reconsideration by a customer is sustained, a condition of approval shall include a requirement for the installation of water efficient plumbing fixtures and/or irrigation systems as defined in Section 9.

(4) In the event an appeal for reconsideration for an additional allocation is requested for irrigation of trees in residential categories, for any agricultural use or for business related use, the City may use the services of a qualified consultant in determining the validity of the request.

(5) A staff committee consisting of the City Water Conservation Coordinator and Water Superintendent shall review all appeals for reconsideration and make decisions on the appeal.

(6) If an applicant disagrees with this decision, the decision may be appealed in the same procedural manner as specified in section 8 (a)(1) to the City Manager or his designee, whose decision shall be final.

Section 9. Water Savings Devices

(a) All customers are encouraged to install and use the following water efficient plumbing fixtures and/or irrigation systems:

(1) Ultra low volume toilets (1.6 gallons per flush or less) as approved by the Building Official.

(2) Low flow shower heads (2.5 gallons per minute or less at 40 psi).

(3) Drip, mini-emitter or low volume sprinkler irrigation systems.

(4) Moisture sensors in association with automated irrigation systems.

(5) Sink and lavatory faucets which limit the flow of water to a maximum of 2.5 gallons per minute at 40 psi.

Section 10. Enforcement

The first billing period after the effective date of this ordinance shall be considered an adjustment period during which no penalties will be imposed for water usage above one's allocation. Beginning with the second billing period after the effective date of this ordinance:

(a) A customer who exceeds the established allocation shall pay a surcharge of four (4) times the rate for the highest tier established in the Water Rate Ordinance per HCF of water for all water used in excess of the allowable allocation during the first or second consecutive billing period.

(b) A customer who exceeds the customer's allocation for three consecutive billing periods shall pay a surcharge of ten (10) times the rate for the highest tier established in the Water Rate Ordinance rate, per HCF, for water in excess of the allowable allocation during the third and subsequent billing periods. As used herein, "excess water" means the amount of water delivered in excess of the amounts stated in Section 6 or as modified by the City Water Superintendent pursuant to Section 7, or those amounts of water set by appeal pursuant to Section 8.

(c) If a customer continues to exceed the established allocation after three consecutive billing periods, the City may install a flow restrictor, at the customer's expense, in the City's meter service connection which reduces water flow and pressure.

(d) Beginning one year from the second billing period after the effective date of this ordinance, and continuing each 12 month period thereafter, an account's total annual allocation, including any approved adjustments, will be compared to the total usage in the same one year period. If the annual usage is equal to or less than the total annual allocation for that account, the account's billing will be adjusted to credit the account for any penalties imposed during that year for water usage in excess of its allocation. New accounts will receive the same adjustment after 12 months' consecutive payment of bills.

Section 11. Severability

If any section, subsection, paragraph, sentence, clause, phrase or word of this ordinance is declared by a court of competent jurisdiction, adjudicated to a final determination, to be void, this City Council finds that said voided part is severable, and that this City Council would have adopted the remainder of this ordinance without the severed and voided part, and that the remainder of this ordinance shall remain in full force and effect.

Section 12. Incompatible Provisions

To the extent any provision of this ordinance is incompatible with or at variance with any prior adopted ordinance or resolution, the provisions of this ordinance shall take precedence, and all prior ordinances shall be interpreted to harmonize with and not change the provisions of this ordinance.

Section 13. Exemption from California Environmental Quality Act

The City Council hereby determines that this ordinance is exempt from review under the California Environmental Quality Act (California Public Resources Code Section 21000 et seq.) because it is an action taken to mitigate a water shortage emergency. The City Council hereby directs the Community Development Director or his designee to prepare a Notice of Exemption indicating that this Ordinance is exempt pursuant to California Public Resources Code Section 21080(b)(4) and to file the Notice of Exemption with the County Clerk of the County of Ventura within five (5) days of the adoption of this ordinance.

JHG:WAO0
8/16/90

RESOLUTION NO. 90-16

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SAN BUENAVENTURA DECLARING A WATER SHORTAGE EMERGENCY CONDITION PREVAILS WITHIN THE AREA SERVED BY THE CITY OF SAN BUENAVENTURA

BE IT RESOLVED by the City Council of the City of San Buenaventura as follows:

SECTION 1: The current rainfall in Ventura County for this water year is more than 30% below normal and projected rainfall is not expected to resolve this deficiency.

SECTION 2: This is the third consecutive year of below average rainfall in said area.

SECTION 3: This deficiency in rainfall, in conjunction with actions of others, has severely impacted the water supply available to the City from its water sources (i.e., the Fox Canyon aquifer, Ventura River, Mound basin and Casitas Municipal Water District), as more fully described in the staff report dated February 22, 1990, which is incorporated herein.

SECTION 4: The City Council takes official notice of the drought conditions presently existing within this portion of Ventura County.

SECTION 5: The City Council therefore finds that the ordinary demands and requirements of water consumers cannot be satisfied without depleting the water supply of the City water system to the extent there would be insufficient water for human consumption, sanitation, and fire protection.

SECTION 6: Based upon these conditions, the City Council hereby declares that a water shortage emergency condition currently prevails within the area served by the City of San Buenaventura.

PASSED AND ADOPTED this 26th day of February, 1990.

'S/ BARBARA J. KAM

City Clerk

90-16/123

ORDINANCE NO. 2005 - 005

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SAN BUENAVENTURA AMENDING SECTIONS 22.160.010, 22.160.020 AND 22.220.020; AND ADDING SECTIONS 22.100.060 AND 22.200.010; OF THE SAN BUENAVENTURA MUNICIPAL CODE RELATIVE TO WATER SERVICE RATES, PRIVATE FIRE LINES AND CHARGES AND SEWER SERVICE CHARGES.

WHEREAS, the City Council finds that user charges for water and wastewater service were last adjusted in June of 2004; and

WHEREAS, the City Council finds that the use of the City-owned right-of-way by both the water and wastewater utilities imposes significant costs for right-of-way maintenance; and

WHEREAS, the City Council finds that, based on analysis prepared by Tuckfield and Associates, June 2005, and incorporated here by reference, an increase in water customer rates averaging 4.5% will provide $605,000 in revenue to meet utility operating and maintenance expenses, including rental of the City-owned right-of-way, and;

WHEREAS, the City Council finds that, based on analysis by Tuckfield and Associates, June 2005, and incorporated here by reference, an increase in wastewater customer rates averaging 5.5% will provide $506,000 in revenue to meet utility operating and maintenance expenses, including rental of the City-owned right-of-way.

THEREFORE, the Council of the City of San Buenaventura does ordain as follows:

SECTION 1: Section 22.100.060 of the City of San Buenaventura Ordinance Code is hereby added to read as follows:

Sec. 22.100.060. Rental of City-Owned Right-of-Way.

The City water system shall pay 1.5% of gross revenues collected from water customers for it's use of the public right-of-way maintained with General Fund monies.

SECTION 2: Section 22.160.010 of the City of San Buenaventura Ordinance Code is hereby amended to read as follows:

Sec. 22.160.010. Rates.

A. *Applicability.* The rates set out in this chapter shall be charged for all water sold, supplied, distributed or transported by the city, except as may be established by contract or elsewhere provided in this Code.

B. *Inside city limits.* The meter rate for water sold, supplied, distributed or transmitted to customers within the city, unless otherwise herein specified, shall be:

1. *Residential water charge.*

Single-Family Residential Dwelling Unit Water Charge

Quantity in 100 Cubic Feet	*Rate per 100 Cubic Feet*
1 to 16	$1.60
17 to 42	2.11
43 and over	3.39

Multiple-Family Residential Dwelling Water Charge

Quantity in 100 Cubic Feet	*Rate per 100 Cubic Feet*
1 to 10	$1.60
11 to 24	2.11
25 and over	3.39

Multiple-family residential customers shall be charged by dividing the total number of dwelling units in that customer's complex into the total amount of water used for the billing period; a bill for the resulting average quantity of water used per dwelling unit is then calculated in the same manner as is done for single-family residential dwelling units (except that the inside city limits multiple-family residential rate scale is used). The bill per unit thus determined shall then be multiplied by the number of dwelling units in the customer's complex.

2. Nonresidential water charge. All customers, who are not classified as single-family residential, multiple-family residential, a municipal facility, or raw water users.

Quantity in 100 Cubic Feet	*Rate per 100 Cubic Feet*
All usage	$2.11

Billing shall be on a bimonthly basis. A service charge shall be made for each account in each billing period and for each partial billing period for new customers or customers terminating service as follows:

For Each	*Service Charge*
5/8 inch meter	$9.82
3/4 inch meter	9.82
1 inch meter	19.33
1.5 inch meter	32.66
2 inch meter	45.96
3 inch meter	104.59
4 inch meter	171.24
6 inch meter	337.57
8 inch meter	503.89
10 inch meter	670.21
12 inch meter	770.00

C. *Outside city limits.* The meter rate for water sold, supplied, distributed or transported to customers outside the city, unless otherwise herein specified, shall be:

1. *Residential water charge.*

Single-Family Residential
Dwelling Unit Water Charge

Quantity in 100 Cubic Feet	*Rate per 100 Cubic Feet*
1 to 16	$ 2.71
17 to 42	3.59
43 and over	5.76

Multiple-Family Residential
Dwelling Water Charge

Quantity in 100 Cubic Feet	*Rate per 100 Cubic Feet*
1 to 10	$2.71
11 to 24	3.59
25 and over	5.76

Multiple-family residential water customers shall be charged by dividing the total number of dwelling units in that customer's complex into the total amount of water used for the billing period; a bill for the resulting average quantity of water used per dwelling unit is then calculated in the same manner as is done for single-family residential dwelling units (except that the outside city limits multiple-family residential rate scale is used). The bill per unit thus determined shall then be multiplied by the number of dwelling units in the customer's complex.

2. *Nonresidential water charge.* All customers who are not classified as single-family residential, multiple-family residential, municipal park or raw water users.

Quantity in 100 Cubic Feet	*Rate per 100 Cubic Feet*
All usage	$3.59

Billing shall be on a bimonthly basis. A service charge shall be made for each account in each billing period and for each partial billing period for new customers or customers terminating service as follows:

For Each	*Service Charge*
5/8 inch meter	$16.75
3/4 inch meter	16.75
1 inch meter	32.89
1.5 inch meter	55.57
2 inch meter	78.10
3 inch meter	177.41
4 inch meter	290.75
6 inch meter	574.11
8 inch meter	856.23
10 inch meter	1,139.59
12 inch meter	1,309.61

D. *Raw water (irrigation water, nonpotable) rates.* The rate shall be $1.11 per 100 cubic feet.

E. *Treated water for irrigation.* Treated water for irrigation uses shall be at the rates as outlined in subsections B. and C.

F. *Reclaimed water rates.* The rate shall be $0.48 per 100 cubic feet. A meter service charge will be applied according to meter size as set forth below.

Billing shall be on a bimonthly basis. A meter service charge shall be made for each account in each billing period, and for each partial billing period for new customers or customers terminating service, as follows:

For Each	*Service Charge*
5/8 inch meter	$9.82
3/4 inch meter	9.82
1 inch meter	19.33
1.5 inch meter	32.66
2 inch meter	45.96
3 inch meter	104.59
4 inch meter	171.24
6 inch meter	337.57
8 inch meter	503.89
10 inch meter	670.21
12 inch meter	770.00

G. *Pass-through charges.* An increase in cost of water or energy purchased by the city or pump charges established or increased by other agencies which shall take effect subsequent to July 1, 1992, shall be passed through to all water users except those in the 0—16 hcf consumption block for the single-family residential customer classification, and 0—10 hcf consumption block for the multifamily residential customer classification, 0—16 hcf consumption block for the nonresidential customer classification and 0—16 hcf consumption block for the raw water (nonpotable, non-fully treated water) customer classification. Pass-through cost shall be in the form of a quantity rate surcharge, effective as of the date of said pump charge and of the purchased water or energy cost increase.

The city manager shall determine the amount of the surcharge increase by estimating the annual increase in cost of purchased water or pump charge and dividing this cost by the quantity of water consumed in the preceding year. The surcharge shall be computed separately for treated and untreated water sales.

H. *Municipal facility rates.* The rate for potable water supplied to municipal facilities shall be as follows:

Usage	*Rate per 100 Cubic Feet*
Park irrigation	$ 1.11
All other usage	2.11

(Code 1971, § 4521; Ord. No. 99-14, § 1, 5-18-99; Ord. No. 2002-9, § 1, 6-25-02)

SECTION 3: Section 22.160.020 of the City of San Buenaventura Ordinance Code is hereby amended to read as follows:

Sec. 22.160.020. Private fire lines.

A. *Inside city limits.* Billing shall be on a bimonthly basis. The rate for standby water service, and any water consumed by private fire lines within the city limits and exclusively for fire protection, whether such lines be connected with automatic sprinkling systems or to hose attachments, shall be as follows:

For each 1 inch fire line	$4.07
For each 2 inch fire line	4.07
For each 3 inch fire line	12.22
For each 4 inch fire line	24.52
For each 6 inch fire line	67.99
For each 8 inch fire line	142.91
For each 10 inch fire line	245.18
For each additional 1 inch of diameter, per inch	4.07

For one-inch fire line meters servicing automatic sprinkling systems and installed on the same water service connection as a domestic meter servicing a single-family residential dwelling unit, the rate for standby water service and any water consumed by private fire lines within the city limits exclusively for fire protection, shall be $1.24 bi-monthly.

B. *Outside city limits.* Billing shall be on a bimonthly basis. The rate for standby water service, and any water consumed by private fire lines outside the city limits and exclusively for fire protection, whether such lines be connected with automatic sprinkling systems or to hose attachments, shall be as follows:

For each 1 inch fire line	$ 6.89
For each 2 inch fire line	6.89
For each 3 inch fire line	20.71
For each 4 inch fire line	41.64
For each 6 inch fire line	115.55
For each 8 inch fire line	242.70
For each 10 inch fire line	416.42
For each additional 1 inch of diameter, per inch	6.89

For one-inch fire line meters servicing automatic sprinkling systems and installed on the same water service connection as a domestic meter servicing a single-family residential dwelling unit, the rate for standby water service and any water consumed by private fire lines outside the city limits exclusively for fire protection, shall be $2.10 bi-monthly.

SECTION 4: Section 22.200.010 of the City of San Buenaventura Ordinance Code is hereby added to read as follows:

Sec. 22.200.010. Rental of City-Owned Right-of-Way.

The City wastewater system shall pay 1.5% of gross revenues collected from water customers for it's use of the public right-of-way maintained with General Fund monies.

SECTION 5: Section 22.220.020 of the City of San Buenaventura Ordinance Code is hereby amended to read as follows:

Sec. 22.220.020. Sewage charges.

There is hereby levied and assessed upon each of the premises having any sewer connection with the sewerage system of the city or otherwise discharging sewage which ultimately passes through the city sewerage system, a service charge for rental payable as hereinafter provided and in an amount determinable as follows.

1. *Single-family and multiple dwellings.*

(a) *Charges.* The following charges shall be made for single-family and multiple dwellings per bimonthly billing period based upon water consumption:

Water Consumption in Hundred Cubic Feet (HCF)	*Bimonthly Sewer Charge*
0-8 HCF	$26.49
9, 10 HCF	32.50
11, 12 HCF	38.50
13, 14 HCF	44.50
15, 16 HCF	50.49
17- over HCF	56.50

(b) *Consumption determination.* For single-family customers, the lowest water consumption during a billing period between November 1st and April 30th of the previous fiscal year shall determine the corresponding bimonthly sewer charge for the next fiscal year.

For multiple dwelling customers, the lowest total water consumption of a customer's complex during a billing period between November 1st and April 30th of the previous fiscal year shall be divided by the total number of dwelling units in that customer's complex. The resulting average water consumption per dwelling unit shall be rounded to the nearest whole number to determine the applicable consumption block above. The sewer charge corresponding to the consumption block shall be multiplied by the total number of dwelling units in the complex to determine the complex's bimonthly sewer charge for the next fiscal year.

2. *Commercial establishments.* Commercial establishments operating within the City of San Buenaventura shall be assigned to one of the six groups outlined below:

(a) Group 1:
- (1) Laundromats
- (2) Car wash
- (3) Professional offices
- (4) Convalescent homes
- (5) Wholesale establishments
- (6) Offices
- (7) Retail establishments
- (8) Public buildings
- (9) Barber and beauty shops
- (10) Gas stations and garages
- (11) Bars without dining facilities
- (12) Theaters
- (13) Gyms
- (14) Hospitals
- (15) Grocery stores without garbage grinders

(b) Group 2:
- (1) Hotels and motels without dining facilities
- (2) Commercial laundries

(c) Group 3:
- (1) Hotels with dining facilities

(d) Group 4:
- (1) Mortuaries
- (2) Grocery stores with garbage grinders

(e) Group 5:
- (1) Bakeries
- (2) Restaurants
- (3) Multi-use shopping centers

(f) Group 6:
- (1) Plant nurseries

Group designation is based on the similarity of discharge strength into the city's sewerage system.

For those commercial establishments where it is claimed that the above grouping would lead to inequitable rates for wastewater service, the utilities manager, or a designee thereof, shall determine the appropriate discharge parameters and place the commercial establishment in the most appropriate group. Any customer may appeal the utilities manager's classification on the

basis of hardship or incorrect calculation to the director of public works or a designee thereof, whose decision shall be final. Appeals shall be processed as set forth below:

Any customer who wishes to appeal the classification shall do so in writing to the director of public works by either using the forms provided by the city or by letter setting forth the reason for the appeal.

The bimonthly billing rate for each commercial group shall be:

Water Consumption in Hundred Cubic Feet (HCF)	Commercial Sewer Charge
Group 1: 0--8	$17.01 /bimonthly billing period
9 +	2.13 per HCF
Group 2: 0--8	$ 19.35 /bimonthly billing period
9 +	2.42 per HCF
Group 3: 0--8	$ 32.49 /bimonthly billing period
9 +	4.06 per HCF
Group 4: 0--8	$ 38.76 /bimonthly billing period
9 +	4.85 per HCF
Group 5: 0--8	$ 38.68 /bimonthly billing period
9 +	4.84 per HCF
Group 6: (SFDUE)	$ 56.50 /bimonthly billing period

3. *Other nondomestic wastewater discharges.* Except as provided in subsections 4., 5., and 8., sewerage charges for other nondomestic wastewater discharge shall be based on volume and strength as determined by the provisions of chapter 22.240 of this part unless such discharge is determined by the public works director to be similar in strength to one of the groups of subsection 2., in which case the public works director may assign the discharge to one of these groups for determination of sewerage charges.

4. *Churches.* Churches or other places of religious worship shall be charged the highest bimonthly sewer charge as listed in subsection 1. Each church or other place of religious worship may appeal to adjust their sewer charge based on water consumption history for single-family customers as described in subsection 1. The filing by a customer of a request for an appeal must be in writing to the utilities manager or a designee thereof, whose decision will be final.

5. *Schools.* Secondary schools, colleges, junior colleges, middle schools, private schools (having shower facilities) will be billed on a bimonthly basis based upon the average daily attendance. The charge will be 1.8 times the maximum single-family dwelling rate per 100 average daily attendance. Elementary schools and other schools not having shower facilities will be billed on a bimonthly basis based upon the average daily attendance. The charge will be 1.4 times the maximum single-family dwelling rate per 100 average daily attendance. It will be the school's responsibility to furnish the utility billing office

with the average daily attendance records for the school within 60 days of the close of school. If these records are not furnished, the utility billing office will use the average daily attendance records from the previous reported year adjusted upward ten percent until the current average daily attendance records are received. The adjusted rate will be effective with the next water billing.

6. *Enforcement.* The manager may adopt reasonable rules and regulations to carry out the purposes of this article.

7. *Customers with no consumption history.* The following charges shall be made for single-family and multiple dwellings with no consumption history:

For single-family customers, a bimonthly sewer charge corresponding to the 9--10 HCF consumption block will remain in effect until a consumption determination is established for the next fiscal year, or following three consecutive billing periods when the charge can be appealed.

For multiple dwelling customers, a bimonthly sewer charge corresponding to the 9--10 HCF consumption block shall be multiplied by the total number of dwelling units in the customer's complex to determine the complex's bimonthly sewer charge for the next fiscal year, or following three consecutive billing periods when the charge can be appealed.

After three consecutive billing periods the customer can appeal to change the bimonthly sewer charge to an average of the consumption amounts of the three billing periods. The filing by a customer of a request for an appeal must be in writing to the utilities manager or a designee thereof, whose decision will be final.

8. *Computation, premises not using city water.* For premises not using city water, the charge shall be based upon the amount of water used each month measured by a meter, or if no meter is used, then by estimate of the city manager, which estimate shall be conclusive.

(Code 1971, § 4642; Ord. No. 2002-9, § 2, 6-25-02)

SECTION 6: Pursuant to Public Resources Code Section 21080(b)(8) and State CEQA Guidelines Section 15273, the City Council finds that the rates established or increased in this Ordinance are statutorily exempt from CEQA because they are for the purpose of meeting operating expenses and obtaining funds for capital projects necessary to maintain service within existing service areas. Funds generated as a result of these rates for asset depreciation shall be designated for capital replacement/improvement. These findings are based upon financial analysis provided to the Council by the Director of Administrative Services, and kept on file and maintained as a part of the City's official financial records. The Planning Manager is directed to file a notice of exemption within five working days of adoption of this Ordinance.

SECTION 7: *Severability.* If any provision, section, subsection, sentence, clause or phrase of this Ordinance is, for any reason, held to be unconstitutional, or the

application thereof to any person or circumstances held to be invalid, such decision shall not affect the validity of the remaining portions of this ordinance. The City Council hereby declares that it would have passed this ordinance, each provision, section, subsection, clause or phrase thereof, irrespective of the fact that any one or more provisions, sections, subsections, sentences, clauses and phrases be declared unconstitutional.

SECTION 8: The Ordinance shall take effect on the 31st day following its final passage and adoption.

PASSED AND ADOPTED this 18th day of July, 2005.

Brian Brennan, Mayor

ATTEST:

City Clerk

APPROVED AS TO FORM:

By:
Robert G. Boehm, City Attorney

STATE OF CALIFORNIA)
COUNTY OF VENTURA) ss
CITY OF SAN BUENAVENTURA)

I, ELAINE M. PRESTON, Deputy City Clerk of the City of San Buenaventura, California, certify that the foregoing Ordinance was passed and adopted by the Council of the City of San Buenaventura, at a regular meeting on July 18, 2005, by the following vote:

AYES: Councilmembers Smith, Weir, Fulton, Andrews, Monahan, Morehouse, and Brennan.

NOES: None.

ABSENT: None.

IN WITNESS WHEREOF, I have set my hand and affixed the seal of the City of San Buenaventura on July 19, 2005.

Deputy City Clerk

CITY OF SAN BUENAVENTURA 1866 EUREKA 1905 CALIFORNIA

APPENDIX E

City Resolutions

RESOLUTION NO. 83-168

A RESOLUTION OF THE CITY COUNCIL OF THE
CITY OF SAN BUENAVENTURA INDICATING APPROVAL
OF THE WATER CONSERVATION PLAN FOR VENTURA COUNTY

WHEREAS, Ventura County faces possible water supply deficit due to ground water overdrafted diminishing available imported water,

WHEREAS, the Ventura County Water Quality Management Plan identifies water conservation as one of its primary goals, and

WHEREAS, the City of San Buenaventura has supported water conservation programming since October, 1975, and

WHEREAS, the City of San Buenaventura can best serve its citizens by managing the water supply in a manner to assure its continued availability, and

WHEREAS, the adoption of the County-wide Conservation Program and participation in it can help achieve water management efficiency.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of San Buenaventura approves the Water Conservation Plan for Ventura County dated September 13, 1983 and urges the Board of Supervisors to implement the program on a county-wide basis.

BE IT FURTHER RESOLVED that Ventura will continue to participate in the programs which are underway in the City and in additional programs that are found to be cost-effective and of benefit to the City of San Buenaventura.

PASSED AND ADOPTED this 14th day of November, 1983.

Barbara J. Kam, City Clerk

SFJ/lm/3

STATE OF CALIFORNIA)
COUNTY OF VENTURA) SS
CITY OF SAN BUENAVENTURA)

I, BARBARA J. KAM, City Clerk of the City of San Buenaventura, do hereby certify that the above and foregoing Resolution was duly passed and adopted by the City Council of said City at a regular meeting held on the 14th day of November , 1983 , by the following vote:

AYES: Councilmembers Sullard, Longo, Henson, Monahan, Orrock, and McWherter.

NOES: None.

ABSENT: Councilman Chaudier.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of said City this 15th day of November, 1983.

City Clerk

83-168/112

RESOLUTION NO. 86-170

A RESOLUTION OF THE CITY COUNCIL OF
THE CITY OF SAN BUENAVENTURA ADOPTING
THE URBAN WATER MANAGEMENT PLAN FOR
THE CITY OF SAN BUENAVENTURA

BE IT RESOLVED by the Council of the City of San Buenaventura as follows:

SECTION 1: The legislature of the State of California passed in 1983 Assembly Bill 797, entitled the Urban Water Management Planning Act.

SECTION 2: The act specifies that each urban water purveyor with more than 3,000 service connections or who supplies more than 3,000 acre-feet of water annually must adopt an Urban Water Management Plan.

SECTION 3: The City of San Buenaventura purveys 24,000 acre-feet of water annually to 25,000 meter service connections which under the Act requires the City to adopt an Urban Water Management Plan.

SECTION 4: The City Council is committed to preserving, managing, and developing the water resources of the City of San Buenaventura for current and future uses.

SECTION 5: The City Council of the City of San Buenaventura hereby adopts the Urban Water Management Plan for the City of San Buenaventura.

PASSED AND ADOPTED this 15th day of December, 1986.

City Clerk

JM/ks/P19

STATE OF CALIFORNIA)
COUNTY OF VENTURA) SS
CITY OF SAN BUENAVENTURA)

I, BARBARA J. KAM, City Clerk of the City of San Buenaventura, do hereby certify that the above and foregoing Resolution was duly passed and adopted by the City Council of said City at a regular meeting held on the 15th day of December , 1986, by the following vote:

AYES: Councilmembers Drake, Crew, Orrock, Burns, McWherter, Monahan, and Sullard.

NOES: None.

ABSENT: None.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of said City this 16th day of December , 1986.

Barbara J. Kam
City Clerk

86-170/123

RESOLUTION NO. 2001-20

A RESOLUTION OF THE COUNCIL OF THE CITY OF SAN BUENAVENTURA ADOPTING AN AMENDED URBAN WATER MANAGEMENT PLAN FOR THE CITY OF SAN BUENAVENTURA

BE IT RESOLVED by the City Council of the City of San Buenaventura as follows:

SECTION 1: The Urban Water Management Planning Act (Water Code Sections 10610 et seq.) requires urban water suppliers providing municipal water directly or indirectly to more than 3,000 customers, or who supply more than 3,000 acre-feet of water annually, to adopt an Urban Water Management Plan.

SECTION 2: The City of San Buenaventura purveys an estimated 21,000 acre-feet of water annually to over 29,200 meter service connections which under the Act requires the City to adopt an Urban Water Management Plan.

SECTION 3: The Urban Water Management Planning Act further requires review of the Urban Water Management Plan at least once every five years with amendment of the Plan as indicated by the review.

SECTION 4: The Act mandates that the Urban Water Management Plan and amended versions be filed with the California Department of Water Resources.

SECTION 5: The City Council previously met the requirements of the Urban Water Management Plan in 1986, 1991 and 1996. The most recently amended Plan has been reviewed, substantially revised, made available for public inspection, and presented at a noticed public hearing on February 12, 2001.

SECTION 6: The City Council of the City of San Buenaventura hereby adopts the amended Urban Water Management Plan for the City of San Buenaventura, dated December 2000 on file in the Office of the City Clerk.

PASSED AND ADOPTED this 12th day of February, 2001.

City Clerk

APPROVED AS TO FORM
ROBERT G. BOEHM, CITY ATTORNEY

STATE OF CALIFORNIA)
COUNTY OF VENTURA) ss
CITY OF SAN BUENAVENTURA)

I, BARBARA J. KAM, City Clerk of the City of San Buenaventura, California, do hereby certify that the foregoing Resolution was duly passed and adopted by the City Council of the City of San Buenaventura at a regular meeting thereof held on the 12th day of February, 2001 by the following vote:

AYES: Councilmembers Friedman, Brennan, Morehouse, Di Guilio, Monahan, De Paola, and Smith.

NOES: None.

ABSENT: None.

IN WITNESS WHEREOF, I have set my hand and affixed the official seal of the City of San Buenaventura this 13th day of February, 2001.

Barbara J. Kam, City Clerk

RESOLUTION NO. 2005-098

A RESOLUTION OF THE COUNCIL OF THE CITY OF SAN BUENAVENTURA ADOPTING AN AMENDED URBAN WATER MANAGEMENT PLAN FOR THE CITY OF SAN BUENAVENTURA

BE IT RESOLVED by the City Council of the City of San Buenaventura as follows:

SECTION 1: The Urban Water Management Planning Act (Water Code Sections 10610 et seq.) requires urban water suppliers providing municipal water directly or indirectly to more than 3,000 customers, or who supply more than 3,000 acre-feet of water annually, to adopt an Urban Water Management Plan.

SECTION 2: The City of San Buenaventura purveys an estimated 23,000 acre-feet of water annually to over 31,000 meter service connections, which under the Act requires the City to adopt an Urban Water Management Plan.

SECTION 3: The Urban Water Management Planning Act further requires review of the Urban Water Management Plan at least once every five years with amendment of the Plan as indicated by the review.

SECTION 4: The Act mandates that the Urban Water Management Plan and amended versions be filed with the California Department of Water Resources.

SECTION 5: The City Council previously met the requirements of the Urban Water Management Plan in 1986, 1991, 1996 and 2000. The most recently amended Plan has been reviewed, substantially revised, made available for public inspection, and presented at a noticed public hearing on December 12, 2005.

SECTION 6: The City Council of the City of San Buenaventura hereby adopts the amended Urban Water Management Plan for the City of San Buenaventura, dated December 2005 on file in the Office of the City Clerk.

PASSED AND ADOPTED this 12th day of December, 2005.

Roxanne Grouli
Assistant City Clerk

APPROVED AS TO FORM
ROBERT G. BOEHM, CITY ATTORNEY

By Patricia D. Lemmo

STATE OF CALIFORNIA)
COUNTY OF VENTURA) ss
CITY OF SAN BUENAVENTURA)

I, FIDELA GARCIA, Deputy City Clerk of the City of San Buenaventura, California, do hereby certify that the foregoing Resolution was passed and adopted by the City Council of the City of San Buenaventura at a regular meeting held on December 12, 2005, by the following vote:

AYES: Councilmembers Brennan, Fulton, Andrews, Monahan, Weir and Morehouse.

NOES: None.

ABSENT: Councilmember Summers.

IN WITNESS WHEREOF, I have set my hand and affixed the seal of the City of San Buenaventura on December 13, 2005.

Fidela Garcia

Fidela Garcia, Deputy City Clerk

CITY OF SAN BUENAVENTURA
1866
EUREKA
1905
CALIFORNIA

STATE OF CALIFORNIA)
)
COUNTY OF VENTURA) ss.
)
CITY OF SAN BUENAVENTURA)

I, Roxanne Fiorillo, CMC, Assistant City Clerk of the City of San Buenaventura, do hereby certify that the foregoing is a true and correct copy of Resolution No. 2005-098 adopted by the City Council on December 12, 2005.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the official seal of said City to be affixed on December 16, 2005.

Roxanne Fiorillo
Assistant City Clerk

RESOLUTION NO. 91-49

A RESOLUTION OF THE COUNCIL OF THE CITY OF SAN BUENAVENTURA APPROVING POLICY AND GUIDELINES FOR DROUGHT RESISTANT LANDSCAPING

BE IT RESOLVED by the City Council of the City of San Buenaventura as follows:

SECTION 1: All proceedings having been duly taken as required by law and upon review of the information provided in the staff report, consideration of the testimony given at the public hearing, as well as other pertinent information, the City Council adopts the following landscape guidelines and policies for multiple family residential, commercial, industrial and institutional projects:

A. Policies:

1. All new projects reviewed by the Architectural Review Board shall install drought tolerant landscaping.

2. Completed projects may request that landscape plans be revised to include drought resistant plants or other alternatives. Such revised plans shall be reviewed and approved by the Architectural Review Board.

3. Single family and duplex developments are encouraged to comply with these guidelines.

4. All landscape plans shall be prepared by a licensed landscape architect.

B. Lawn Areas:

1. The maximum allowed lawn area shall be 25% of the total landscaped area.

2. Lawn shall not be planted in any area where slope gradient exceeds 4% unless approved by the Architectural Review Board.

3. Lawn areas shall be pooled into high visual impact and functional use areas. Lawn shall not be used along long narrow pathways, in parkway strips and roadway medians or along foundations of buildings.

4. Lawn types shall be warm-season/drought-tolerant.

5. If a lawn area is an essential part of a development, such as playing fields for schools, a

higher percentage may be allowed at the discretion of the Architectural Review Board.

C. Types of Plants:

1. Plants in non-lawn areas shall be drought-tolerant plants.

2. Mulch substitution for ground cover is encouraged. One of the following materials may be used along with low-spreading drought-tolerant plants and/or shrubs:

   a. Bark
   b. Cobbles
   c. Gravel

   Mulch substitutes shall be maintained in their original condition, weed free, unless covered by plant material. No plastic underlayer shall be used in conjunction with the mulch substitutes.

   Use of these materials in high foot traffic areas shall be reviewed and approved by the Architectural Review Board.

3. Plants shall be grouped according to water needs and appropriately located with respect to slope and sun exposure. Plants which are not low water using shall be grouped together in confined areas or placed in the shade to reduce their water needs.

D. Soil Preparation:

1. To achieve a well drained soil with adequate water holding capacity, tilling of the soil and/or addition of soil amendments shall be done in all planting areas prior to landscape installation. Soil preparation shall be shown on landscape plans and shall be based on actual soil requirements.

E. Irrigation Systems:

1. Rain cup or other such device shall be used to insure automatic shutdown during rain periods.

2. Low volume/low precipitation rate irrigation heads shall be provided. Precipitation rates shall not exceed infiltration rates. The project landscape architect shall provide precipitation rate chart/soil test results to the City at the time of final inspection of the project.

3. Lawn areas shall leave valves activated by moisture sensors.

4. Drip/trickle/or micro spray irrigation shall be used where applicable.

5. Landscape materials which have different watering needs shall be irrigated by separate control valves. Gravel shall be placed in all control boxes.

6. Backflow devices shall be painted dark brown and screened with shrubs with a three foot clearance around fire hose connections.

7. Sprinklers shall not throw water off the property onto public right-of-way (i.e. sidewalks and streets), paved areas or into non-planted areas or allow run-off into these areas.

F. Ornamental Ponds:

1. Water bodies that are part of the landscaping for new developments shall be discouraged. If the water element is an integral part of the operation of the new development, the surface area of the water element shall be counted as lawn in the calculations for limitations of lawn area. Water which is sprayed into the air shall be discouraged.

2. Active water recreation areas such as swimming pools and spas shall be excluded from these restrictions.

PASSED AND ADOPTED this 10th day of June, 1991.

City Clerk

STATE OF CALIFORNIA)
COUNTY OF VENTURA) ss
CITY OF SAN BUENAVENTURA)

I, BARBARA J. KAM, City Clerk of the City of San Buenaventura, California, do hereby certify that the foregoing Resolution was passed and adopted by the City Council of the City of San Buenaventura at a regular meeting thereof, held on the 10th of June, 1991 by the following vote:

AYES: Councilmembers Collart, Bean, Tuttle, Monahan, McWherter, Villeneuve and Francis.

NOES: None.

ABSENT: None.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City of San Buenaventura this 11th day of June, 1991.

City Clerk

APPENDIX F

Reclaimed Water System Expansion Policy

ADMINISTRATIVE REPORT

Date: July 2, 1999

Agenda Item No.: 9

Council Action Date: July 12, 1999

To: DONNA LANDEROS, CITY MANAGER

From: RONALD J. CALKINS, DIRECTOR OF PUBLIC WORKS

Subject: RECLAIMED WATER SYSTEM EXPANSION POLICY

RECOMMENDED ACTION

It is recommended that the City Council review and adopt the attached Policy for Reclaimed Water Use.

SUMMARY

At the October 26, 1998 Council Meeting, staff was directed to return to Council with recommendations for future improvements to the reclaimed water system with possible funding options. A policy has been developed that will establish guidelines to enable the City to expand the reclaimed water system and pay for the cost of related improvements. The proposed mechanism is to charge each customer a connection fee, similar to water and sewer services.

Adoption of the policy will allow the City to provide reclaimed water to new and existing potable water customers, thereby decreasing potable water demand. This increased reclaimed water usage for landscape irrigation would assist us in offsetting our need for an alternative water supply to meet future demands and would result in financial savings to our customers.

ALTERNATIVES

Instead of the recommended action, Council could choose to not adopt the proposed policy, or to change various portions of the recommended policy.

FISCAL IMPACTS

There is no fiscal impact associated with Council adoption of the policy. However, with implementation of the proposed reclaimed water policy, fiscal impacts to the City and future reclaimed water customers would occur.

The fiscal impact to the City would include the costs associated with expanding the system. In additional to these costs there would be a minor loss of water sales associated with the customer switching from potable to reclaimed water. However, the beneficial savings to the City through decreased potable water demand would be greater than the costs associated with implementing the Policy.

Existing potable water customers in the defined focus area (see map) will be evaluated for connection to the reclaimed water system. New developments in this area will be required to connect for landscape irrigation. These future reclaimed water customers may fund a portion of the City's costs associated with expanding the reclaimed water system. Their costs would vary depending on their proximity to the existing reclaimed water system, the presence of a separate irrigation meter and their proportional share of the cost of improvements. Once in place, they will enjoy ongoing cost savings because reclaimed water rates are significantly less than potable water rates.

DISCUSSION

The Ventura Water Reclamation Facility provides Tertiary wastewater treatment to deliver highly treated reclaimed water. This reclaimed water is currently provided for landscape irrigation to the City's Buenaventura and Olivas Park Golf Courses, Marina Park, the Olivas Adobe, the Four Points Hotel Sheraton, the Ventura Port District and the LA Times Building, near the Buenaventura Golf Course.

At the October 26, 1998 Council Meeting, staff was directed to return to Council with recommendations for future improvements to the reclaimed water system and possible funding options. The discussion has been broken down to the following topics:

- Existing Master Plan for Reclaimed Water System
- Reclaimed Water Supply
- Reclaimed Water Demand
- Guidelines for Reclaimed Water Use
- Recommendations for Future Improvements
- Funding Options

Existing Master Plan for Reclaimed Water System

In August of 1992, Black & Veatch completed the City's Master Plan for Reclaimed Water (Master Plan). The Master Plan included an overview of the existing reclaimed water system and an implementation plan for potential expansion alternatives. The Master Plan recommended several projects that would expand and improve the reclaimed water system and in turn make better use of our reclaimed water as a resource. The capital costs associated with the implementation of all the recommended improvements were estimated in 1992 to be over $5 million. The recommended improvements were based on a number of assumptions such as the amount of available effluent and the potential use of reclaimed water by several large users. Implementation of all the recommended improvements is not justified at this time because: (1) the amount of available effluent supply is less than anticipated; and (2) the proposed expansion of the golf courses will utilize most or all of the estimated available supply.

Reclaimed Water Supply

Current average annual effluent flows are approximately 9 millions gallons per day (mgd). A portion of the effluent is pumped to reclaimed water customers and a portion is lost to evaporation and percolation losses. The remaining effluent is discharged to the Santa Clara River estuary. The Master Plan indicates that historically, evaporation and percolation losses have averaged 1.25 mgd, with most of this amount due to percolation through the ponds. A minimum of 5.6 mgd effluent must be discharged to the Santa Clara River Estuary as required by the existing Regional Water Quality Control Board NPDES Permit. The current amount of available reclaimed water supply averages approximately 2.2 mgd.

Reclaimed Water Demands

Some revisions and minor modifications have been made to the reclaimed water distribution system since the Master Plan was completed. Most recently, the Los Angeles Times Building service near the Buenaventura Golf Course has been added. The average maximum day demand for the entire system over the last three years is approximately 1 mgd.

Therefore, the current available supply of reclaimed water to customers above and beyond existing demands is approximately 1.2 mgd.

Guidelines for Reclaimed Water Use

The City does not have an existing policy for reclaimed water use. The proposed policy will establish guidelines to enable the City to provide existing and new customers with reclaimed water.

Recommendations for Future Improvements

An analysis of the existing reclaimed water system was completed to determine the recommendation for future expansion. Significant findings from the analysis are shown below.

- The available amount of reclaimed water supply is currently substantially less than the estimated amount per the Master Plan.
- The average maximum day demand for the entire system over the last three years is approximately 1 mgd.
- The current available supply of reclaimed water to customers above and beyond existing demands is approximately 1.2 mgd.
- If approved, expansion of the Olivas Park and Buenaventura Golf Courses are scheduled to occur within three to five years. These expansions will use most or all of the estimated available supply.
- The current reclaimed water charges do not include enough revenue for expansion and/or upgrades to the existing reclaimed water system.
- The City does not have an existing policy for reclaimed water use.
- There are a number of existing customers using potable water for irrigation that are located near existing reclaimed water mains that have expressed an interest in using reclaimed water.

Funding Options

For minor improvements that impact a single customer, such as disconnect from the potable system and connection to the reclaimed system, the customer should pay the costs. Payment options may include (1) payment through a charge on their water bill, or (2) supplemental funding by the water enterprise fund where warranted.

For major improvements that impact several customers, such as expansion of the system and/or the addition of new facilities, cost allocation among the customers will be

evaluated. Funding options may include (1) partial funding by the water enterprise fund if the cost to provide reclaimed water service is equal to or less than the cost to offset potable water demand, or (2) funding by customers based on the proportional cost to provide the improvements. These are funding options considered by staff. When a proposed expansion is under evaluation, staff will return to council for specific funding authorization.

Based on the above findings, we recommend the attached Policy be adopted.

Prepared by Greg Morehead,
Utilities Manager, for

Ronald J. Calkins
Director of Public Works

Reviewed as to fiscal impacts

Marilyn E. Leuck
Director of Management Resources

FORWARDED TO THE CITY COUNCIL

Office of the City Manager

Attachment A: Policy for Reclaimed Water Use

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CITY OF SAN BUENAVENTURA

Policy Guidelines for Reclaimed Water Use

A. Purpose

A.1 The purpose of this reclaimed water policy is to establish guidelines that will enable the City to continue to pursue reclaimed water as a source to offset potable water demand, thereby increasing the City's ability to better utilize its water resources.

B. Policy Guidelines

B.1 The City should pursue cost effective, environmentally sound alternatives that could potentially increase the available supply of reclaimed water.

B.2 All City facilities will have first priority for the use of reclaimed water. The City's golf courses are anticipated to be expanded in the near future. Upgrades to the existing reclaimed water system and/or new facilities required to meet the demands of the proposed expansions will be paid for directly by the Golf Enterprise Fund.

B.3 Existing potable irrigation customers located near existing reclaimed water mains or within the defined reclaimed water focus area, as identified in the attached Figure 1, will be evaluated for the use of reclaimed water. Existing accounts will be identified and evaluated on a case by case basis by the Public Works Department. The Public Works Department will determine if the use of reclaimed water will offset the City's potable supply and whether the cost to provide reclaimed water service is equal to or less than the cost to offset the potable water demand. Customers identified by the evaluation will be contacted and encouraged to use reclaimed water when it is deemed to be cost effective.

B.4 New development located near existing reclaimed water mains or within the defined reclaimed water focus area, as identified in the attached Figure 1, will be required to use reclaimed water in lieu of potable water for irrigation and other uses as appropriate. Each development will be required to pay for upgrades to the existing reclaimed water facilities and/or new facilities required to meet their reclaimed water demands. Developments will be evaluated by the Public Works Department on a case by case basis with the determination to be made by the Public Works Director. To the extent that facilities benefit more than one customer, the City will make an effort to proportionally spread the cost of the improvement to the beneficiaries.

C. Appeals

C.1 Any customer/developer may appeal for reconsideration of the Public Works Department requirement to use reclaimed water in lieu of potable water and the required payment of upgrades to the existing reclaimed water facilities and/or new facilities required to meet their reclaimed water demands. Appeals for reconsideration shall be processed as set forth below.

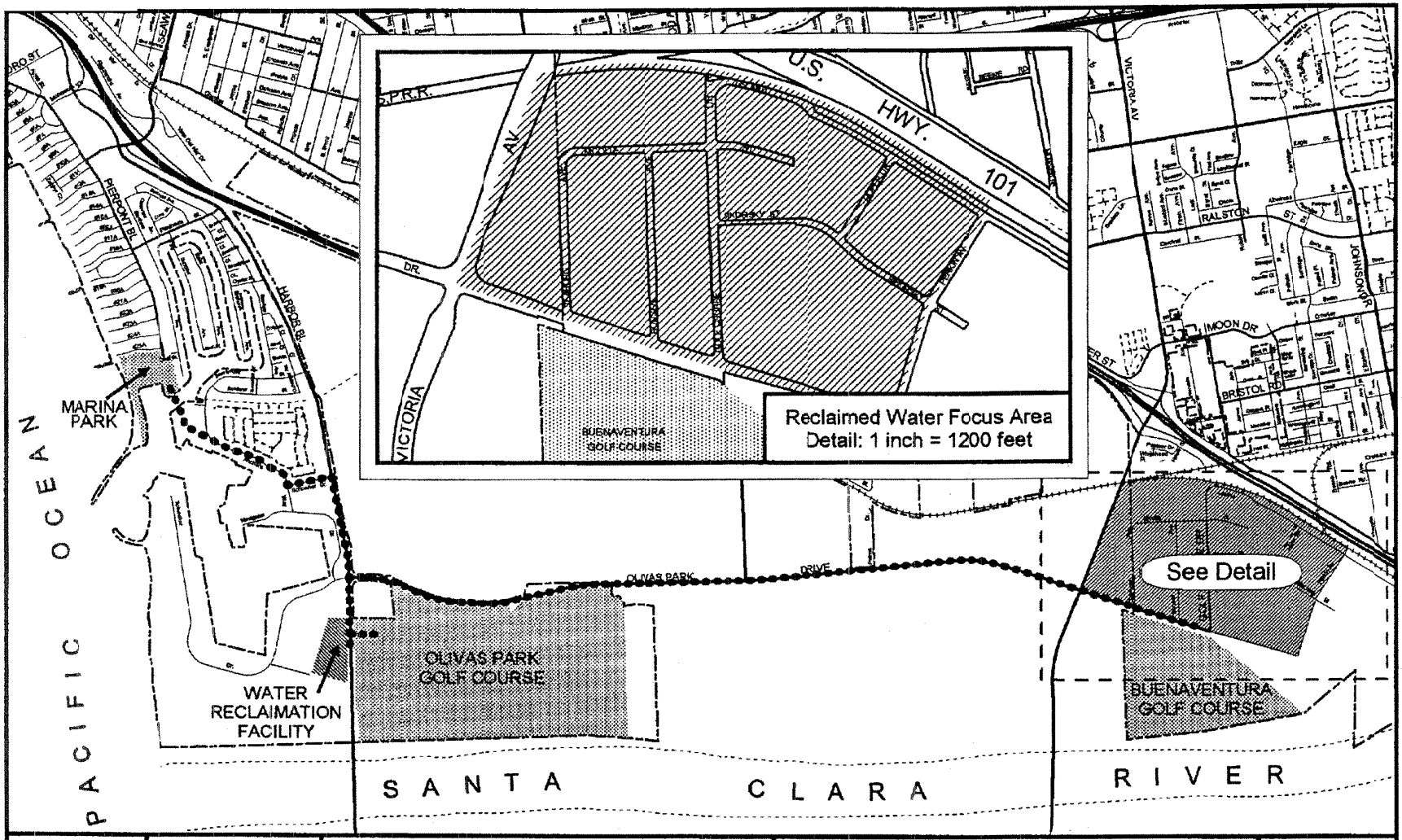
(1) Any customer/developer who wishes to appeal for reconsideration of the requirement to use reclaimed water shall do so in writing to the City Utilities Manager by letter setting forth the reasons for the appeal.

(2) The appeal for reconsideration shall be reviewed by the City Utilities Administration Office and a site visit scheduled if required.

(3) A committee consisting of the Director of Public Works, Utilities Manager and Utilities Planning Engineer shall review all appeals for reconsideration and make decisions on the appeal.

(4) If a customer/developer disagrees with this decision, the decision may be appealed in the same procedural manner as specified above to the City Manager or designee, whose decision shall be final.

Attachment: Figure 1 – Reclaimed Water Focus Area



Prepared By: Geographic Information Systems

Department: A.S.

Division: I.T.

Section: I.S.

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Title:

FIGURE 1
Reclaimed Water Focus Area*

Prepared For: City of San Buenaventura

Legend:

- Existing Reclaimed Water PipeLine
- Reclaimed Water - Focus Area

*See 'Policy for Reclaimed Water Use'

NORTH

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1" = 2400'